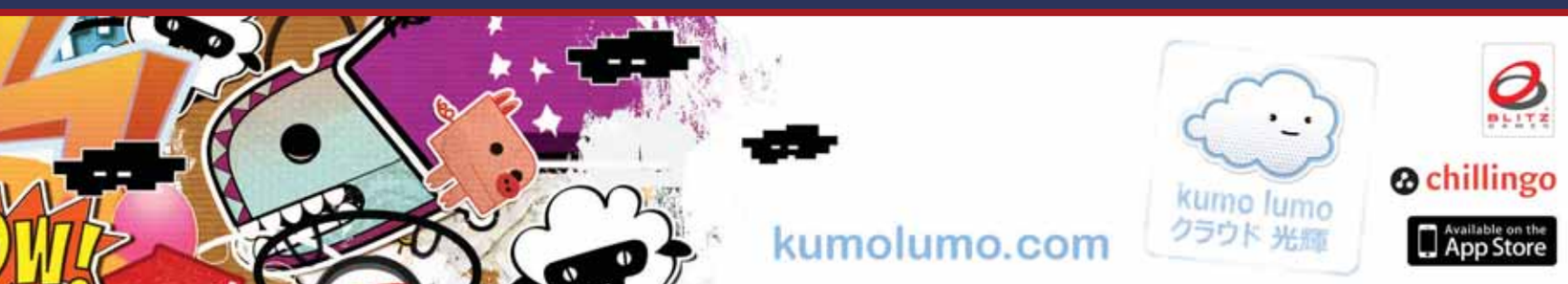
SEPTEMBER 2012 | #131 | £4 / €7 / $13
WWW.DEVELOP-ONLINE.NET

THE LONDON ISSUE

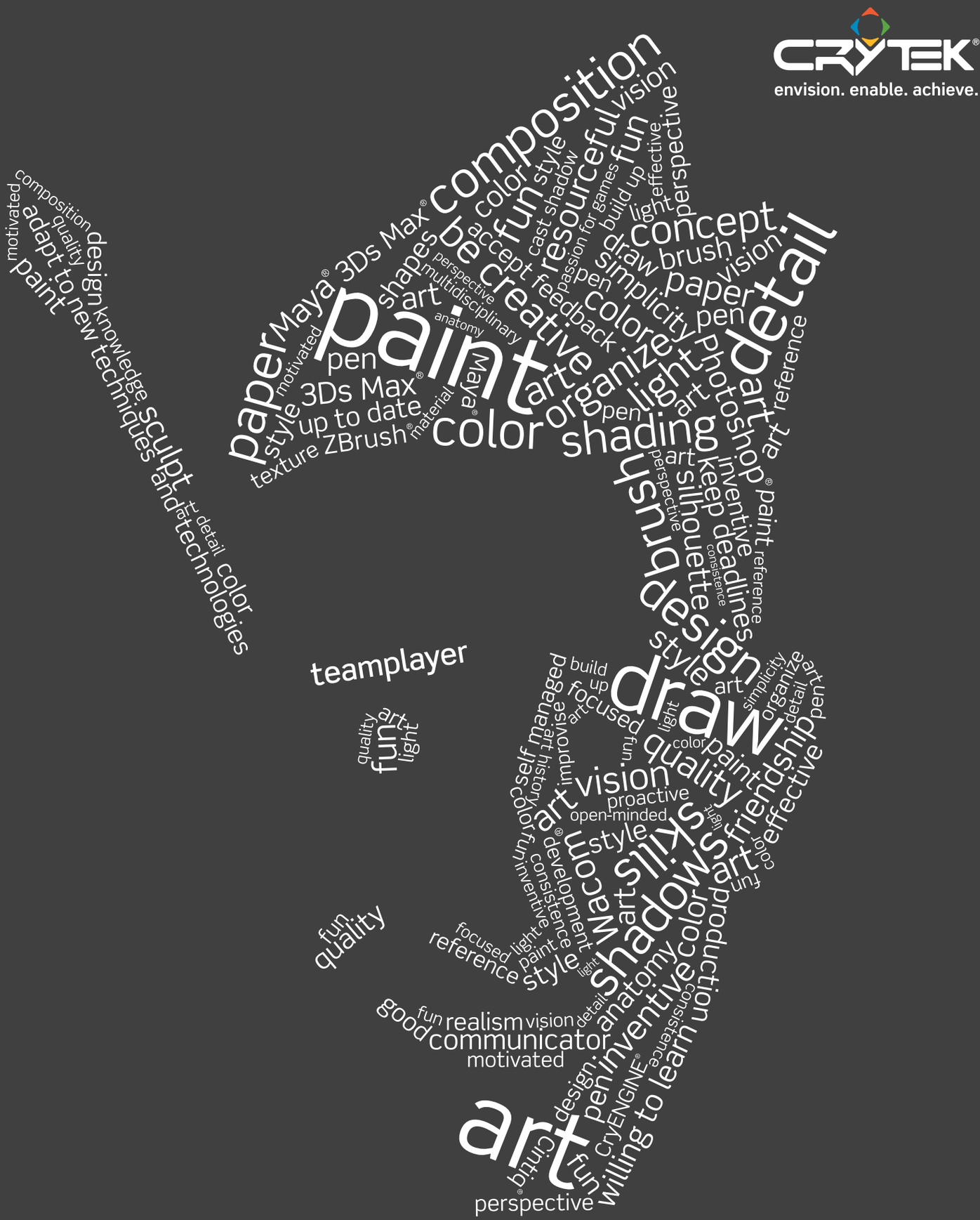
develop

AN IN-DEPTH GUIDE TO THE GAMES FIRMS POPULATING THE CAPITAL



CRYTEK®

envision. enable. achieve.



Have you got what it takes to be an artist?

crytek.com/career

© 2012 Crytek GmbH. Crytek and CryENGINE are registered trademarks or trademarks of Crytek GmbH in the USA, Germany and/or other countries. All rights reserved. All other trademarks are the property of their respective owners.

develop
GAME DESIGN | CODING | ART | SOUND | BUSINESS

NEW STAR SOCCER

SIMON READ ON HIS MOBILE SUPER-HIT

"I wouldn't say I was a very good coder. I just get stuff to work and if it does then I'm OK, and I move on to the next challenge."

A true bedroom coder's humble outlook starts on **page 27**

LONDON: AN A-TO-Z

An essential guide to the studios, tech and service outfits shaping the capital's new games scene

PRELOADED WITH PURPOSE

London outfit Preloaded explains its unique approach to making 'games with meaning'

GRAPHICS AND RENDERING

Is a collective obsession with photorealism good for the industry, or misguided? We investigate

Contents

DEVELOP ISSUE 131 SEPTEMBER 2012

ALPHA

06

NEWS FOCUS: LONDON'S NEW STUDIOS
A look at the new wave of development giants – including GREE, Konami and Xbox – moving into the UK capital

08

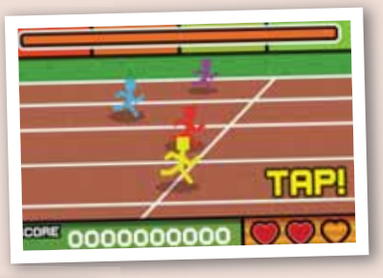
ANALYSIS: THE CLOUD
Consultant Nick Gibson ponders the future of remote gaming

11

OPINION: GAMIFICATION
Fluffy Logic's Ana Kronschnabl wonders if there's any meaning left in the marketeer-plundered term

12

ADVICE: COLLABORATION
Will Luton of Mobile Pie on why inderpendent studios must become interdependent



14

THE DEVELOP DIARY
Keep track of the industry's pulse with our monthly guide to events, game releases, and culturally significant dates

BETA

20 - 23

LONDON: AN A-TO-Z
All the developers, tech companies and service providers putting London on the map

24 - 25

MEANINGFUL GAMES
Preloaded on doing things a little differently from its East London home

27 - 29

RISING STAR
One-man mobile dev Simon Read tells Develop how he's turned a humble football game into a global hit

31 - 33

INSIDE BLITZ
The long-standing games developer opens its doors to a wealth of opportunities

CODA

64 **A SIDEWAYS LOOK AT GAMES**
Inside the mind of David Cage, a month in Tweets, and much more

"You can't fight content. The game has to emerge out of it. If you start to try and battle with it, you quickly realise the game design never really met with the content in the first place." *Phil Stuart, Preloaded, pg24*

BUILD

38-40

BEYOND PHOTOREALISM
Just how important are lifelike graphics? We ask the experts

42-43

TOOLS NEWS
IK specialist IKinema ponders the virtues of virtual production as it unveils its new LiveAction tech

46

EPIC DIAIRES
A look at how Unreal Engine 3 let Lionhead push the Fable series in new directions

49

HEARD ABOUT
Sony's new standards for loudness could have ramifications beyond the walls of the platform holder, says John Broomhall

develop DIRECTORY 53 - 63
STUDIOS, TOOLS, SERVICES AND COURSES

EDITORIAL

LONDON'S CALLING

I'm lucky enough to call London my home in 2012.

Despite being nothing of an athlete, it's always exciting when I glance the Olympics site from my living room window. A short walk and I'm in the new East London technology hub. And everywhere in the urban sprawl, there seems to be a games studio within earshot.

The UK's capital has always been a key member of the global development community, but of late the centre for finance and culture has started to enjoy a new era of games making greatness.

It's likely a little premature to give all the credit for the likes of GREE, Konami, Microsoft and others establishing new studios there to the UK's forthcoming tax breaks. But don't forget the city's pool of development talent serves as a major pull to companies across the world and in many sectors.

It's because of all these factors that we've made the issue you hold in your hands a London special. Turn the page, and you'll see all the news on the latest studios to make a home in the city. Flip to page 20, and you'll find our A-to-Z guide to the region's most important games outfits. Four pages later, we take a trip to Preloaded, an atypical studio that typifies London's thriving dev scene.

However, all this optimisim is offset by some sad news that emerged as this month's *Develop* went to the printers. One of the UK's longest-running studios, Sony Liverpool, has closed its doors. After 28 years making and publishing games, the studio that started life as Psygnosis in 1984 is gone. As soon as the news emerged, an outpouring of dismay made its way through the industry.

The reason for such vocal dissapointment? The studio is behind some of the most beloved games in the world. *Lemmings*, *Wipeout*, *Shadow of the Beast*; these are the games Psygnosis and SCE Liverpool brought us. And my favourite, *Agony*.

Could the studio be a victim of a shift that sees the UK's northerly talent move on London?

For, thanks to the SCE Liverpool staff for all the games, and best of luck with the future. We'll miss your place at the heart of the UK games industry.

Will Freeman
will.freeman@intentmedia.co.uk

Games dev giants descend on London

Games development elite establish new operations in UK capital as Konami eyes local football culture, GREE looks to establish pan-European base, Amazon readies an interactive entertainment hub and Microsoft calls on local talent

by Will Freeman

A NUMBER of the industry's major players are opening sizable new games studios across the UK capital London.

Japanese social gaming giant GREE is poised to occupy a new 100-person base in East London, while Konami and Microsoft both a have studios currently being established in the city. Meanwhile tech outfit Amazon is to found its new Digital Media Centre in the city, which will craft interactive services and entertainment across console, mobile, PC and TV platforms.

As revealed by *Develop's* sister magazine *MCV*, Microsoft is currently hiring senior staff for a new London studio, which will join the company's established UK operations Rare, Lionhead and Soho Studios.

"EMEA (Europe, Middle East and Africa) is a key market for us and we continue to cultivate the best talent and focus on growing our business, with this role focused on the continued expansion of Microsoft Studios business in the region," the company said in a statement.

The requirements in job listings for the new Microsoft studio suggest the secrecy shrouded operation may also serve to add first-party free-to-play and online casual content to Xbox.

The iconic city of London has a wealth of talent to thank in part for its allure to global development studios.

Elsewhere Konami's soon-to-be-opened development house is to focus on the *Pro Evolution Soccer* series, serving as a Western wing for Tokyo-based PES Productions. Debuting on the London dev scene with 20 staff, the team is expected to grow to 100, pointing to a significant element of the *PES* development process.

> ***"We are looking for people to capture the very essence of the beautiful game and bring it to life."***
>
> Shinji Hirano, Konami Europe

"We are looking for people to capture the very essence of the beautiful game and bring it to life," said Konami Europe president Shinji Hirano, who hopes the new team can pull on European football culture from their position in a city awash with the sport.

Amazon's new London media and technology hub, meanwhile, joins a wealth of companies to make a base in the city's fashionable East End district, along with GREE (see panel, right). And, like both Konami and Microsoft, it hopes to take advantage of London's renowned stock of games development talent.

"London is a hotbed of tech talent," said an Amazon spokesperson. "We are a growing company. We believe that London will provide us with a great pool of talent from which to draw."

With Amazon set to release the UK Kindle Fire platform, which offers online elements comparable to Xbox Live, and the company's UK PC games download service potentially launching next year, the vast organisation appears intent on becoming a substantial player in the region's games business.

While the likes of Sony have long had studios in London, in recent years the city has become famed for housing innovating tech outfits in the social and indie space such as Mind Candy, Makie Labs and UsTwo. The arrival of GREE, Amazon, Microsoft and Konami demonstrates, however, that the UK capital can still attract triple-A studios, global organisations and platform holders.

Turn to pages 20 - 23 to read our A-Z guide to the studios shaping London's dev scene.

LONDON SPOTLIGHT: GREE

Will Freeman talks to GREE's UK country manager about why the company has made a home in the city's eastern district

NOT SO LONG ago GREE remained something of a mystery. Outside of Japan, everybody knew it was one of the country's key players in the social and mobile space, but its global presence was a less known entity.

Today, however, GREE's status as an international platform is impossible to miss, as it continues to work with numerous European studios, delivering games to the Eastern and Western markets, while acquiring companies across the planet.

And now it has a new London studio underway.

A small GREE presence has existed in the city for a short time, based in tourist hotspot Covent Garden. However, now a far bigger building set to house 100 staff is being prepared near Liverpool Street in the heart of East London.

"We chose London for many reasons," GREE UK country manager Daisuke Kobayashi told *Develop*. "It is the commercial centre for Europe, but we also saw that it is where the best talent is for our space. For mobile and social games there are so many people from small teams that are very creative and talented. We think that here we will be able to hire the best artists, games designers and so on."

Like many of the larger games companies' London outfits, GREE's new base will also serve as an outpost to drive business not just in Europe, but the Middle East, Asia, and, because of the dominance of European languages, Latin America, making it a studio with a vast reach and influence.

And GREE isn't put off by the competition for talent from other key players and new studios in London.

"London is certainly very attractive for games companies," offered Kobayashi. "But at GREE we need the best talent, so we have to be at the best locations. We do not stay away from competition; we face competition, and we are confident we can overcome those problems.`

The studio will serve to make games for all of GREE's global markets, work with external developers, provide inventory and services, and deliver a variety of administrative functions.

//COMMENT: BUSINESS

Cloudy forecasts

by **Nick Gibson**, Games Investor Consulting

Times may be tough for OnLive (above), but rival Gaikai's recent aquisition by Sony proves the cloud may yet reveal a silver lining for game makers

THE $380M ACQUISITION of Gaikai by Sony in July has undoubtedly changed the current cloud gaming landscape, but what does it mean for the future of this fascinating if commercially unproven market, and how will it impact Sony's prospects?

Contrary to what many seem to think, the sort of video stream-based games on demand services provided by Gaikai and the now troubled OnLive have been around since the early 2000s, provided by companies such as G-Cluster.

With such a long history, it begs the question as to why the market has not blossomed sooner. The obvious answer – that there hasn't been the broadband infrastructure to support it – tells only part of the story. G-Cluster was acquired in 2003 by Japanese cable giant Softbank Broadmedia, a company whose network infrastructure was perfectly capable of handling video streaming.

Since then, around two-dozen companies have announced or launched games on-demand services. However, none has been able to move beyond monetising relatively niche audiences.

> ***"Sony's purchase of Gaikai has radically revitalised the market's prospects by opening it up to consoles as a source of content."***

The reasons for this underperformance are manifold but, as bandwidth and technology have steadily improved, it's become clear that they lie less in the perceived inadequacies of the streaming technology or network infrastructure and more in the target audience and the content being offered to it. Until recently the focus of games on demand providers was the PC, not only as the client platform but, crucially, also as the source of games content. The market for major client download and boxed PC games has been shrinking for over 12 years precipitating a downward spiral of decreasing investment and ever fewer major exclusives each year.

Fortunately, Sony's purchase of Gaikai has radically revitalised the market's prospects by opening it up to consoles as a source of content and a natural client platform. As a source of content, the PlayStation platforms' library is vast, containing more blockbusters than PC can manage and comprising games that are much better suited to streaming to different client platforms such as TVs due to their controller interfaces.

Consoles also represent great client platforms too, with their plug-and-play ease of access, TV connectivity and huge dedicated gamer audiences.

SIZE MATTERS

For Sony, the acquisition provides a new but hugely complementary distribution method that neatly overcomes the potentially commercially debilitating issues of digitally distributing games that can be 50GB in size or more to limited capacity hard drives.

It also provides valuable low-friction try-before-you-buy marketing opportunities.

The addressable market for PlayStation games could potentially double based on Sony's current TV shipment volume alone. Extending its vast portfolio of titles to a mass market as yet unreached by Sony's core gaming business also fits well alongside its current mobile PlayStation diversification strategy. I believe this is a key reason why Sony paid so much to secure a proven cloud gaming solution, and it will be interesting to see how Microsoft, Nintendo and other consumer electronics companies respond.

Nick Gibson is a director at Games Investor Consulting, providing research, strategy consulting and corporate finance services to the games, media and finance industries. **www.gamesinvestor.com**

develop iPad | Videos are available within the iPad Edition of **Develop** on iTunes and the Browser-based Digital Edition, which can be accessed at **develop-online.net**

THIS MONTH: Blitz Games' mobile debut Kumo Lumo **IKinema's virtual production toolset LiveAction** Otherworldly Unity platformer Pid

Sponsored by bigWORLD TECHNOLOGY

Enlighten™
Next generation lighting. Today.
"Enlighten has given us unparalleled productivity on Need for Speed: The Run"
- Alex Ferrier, Lead Graphics, EA Black Box
"What you see in Battlefield 3 is only the beginning"
- Patrick Soderlund, Exec VP Games, EA

Enlighten is the complete solution for all types of game lighting.

> Real-time global illumination technology delivers fully dynamic lighting on today's consoles
> Fully scalable technology – from mobile to next gen
> Heavily optimised lightweight runtime
> Flexible tools and workflow for all game styles
> High-quality lightmap baking tools for static and hybrid lighting modes
> Available for Xbox 360®, PlayStation®3 and PlayStation®Vita, Wii U™, PC, iOS and Android
> Real-time in game and in editor

Geomerics

develop INDUSTRY EXCELLENCE AWARDS WINNER '12

Screenshots courtesy of Square Enix, CCP Games and Electronic Arts. All images ©2012.

quality matters
Whether it's your new Console, PC, Handheld or Smartphone Game, the quality of your product matters to us.
QA Localisation ▪ Functionality ▪ Compliance
User Experience ▪ Compatibility
TESTRONIC laboratories
talk to us. we can help.
www.testroniclabs.com ▪ talk@testroniclabs.com ▪ +44 (0) 2070 421 700

//COMMENT: TRENDS

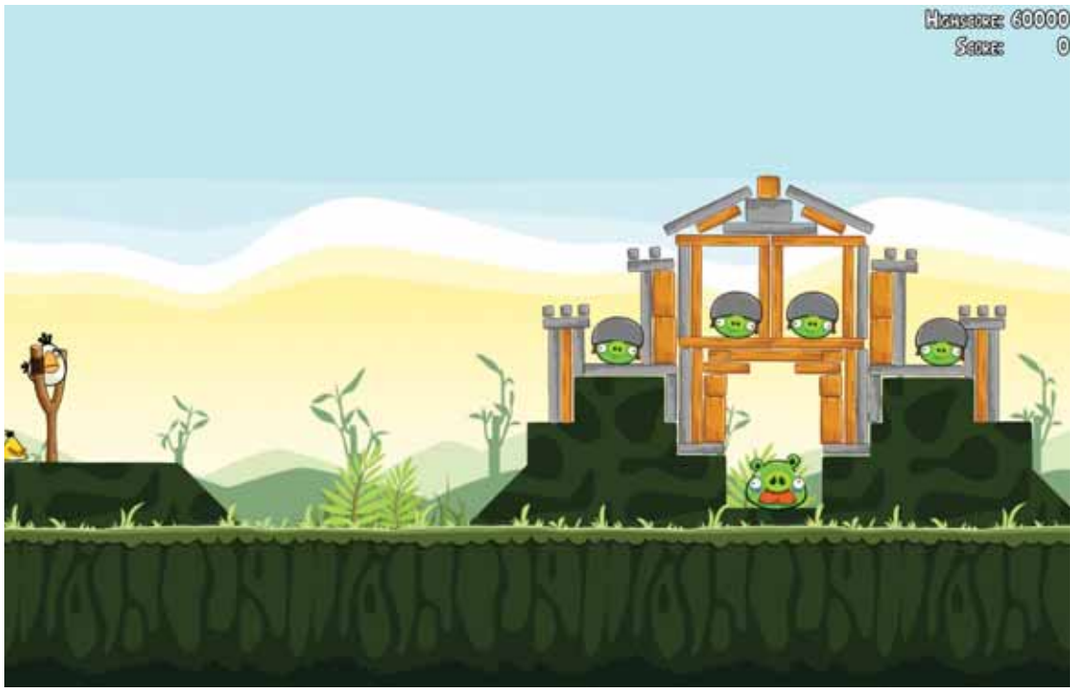
Is life a game?

by **Ana Kronschnabl,** Fluffy Logic

IT USED TO seem so clear; a game was something we played on a rainy Sunday afternoon, gathered around the dining room table, rolling dice and claiming to own all the power companies, represented by a top hat. Or with a skipping rope in the playground at break-time, or a hoop and whip... only joking.

However, you get my drift? Gaming used to be an obvious pursuit. It was signalled by certain specific items and with the agreement, tacit or otherwise, of everyone involved.

Now, gaming seems to have crept into every corner of my interactions with the world, or at least it is promising to. I am not, in this particular instance, referring to the mobile devices, phones, consoles and so on that I could be choosing to play games on.



The sensational mainstream cultural impact of titles like Angry Birds may have convinced non-gaming companies that our medium will bring them nothing but success and riches.

THE G WORD

I'm talking about the gradual 'gamification' of my interactions with the world around me. For those who have somehow escaped this concept, to quote Wikipedia: "Gamification is the use of game design techniques, game thinking and game mechanics to enhance non-game contexts."

Gamification as a term was first used in 2004 as a marketing and selling tool: a way of persuading people to engage with a product through aspects often found in games. These 'gamification' mechanics range from ideas such as virtual currency that the player/buyer can access by engaging with the product in various ways, using achievements, rewards and even embedding smaller, casual games within the product itself.

Gamification really started to grab the marketers imagination when they realised the potential in relation to websites and apps; brands were given a way of speaking to customers directly. The longer a consumer can be persuaded to engage with a brand, the more information or analytics can be obtained, and the more brand loyalty can be promoted.

So, does it work? I really don't know. Certainly, anything that makes choosing house insurance entertaining can't be all bad. However, the cynic in me questions just how 'fun' certain things can ever actually be. There is also the possibility that the concept of gamification, as a blanket approach, is really just a fad. After customers have got over the initial excitement of a question and answer 'game' every time they want to choose a new bank account that interest will fade.

So, what is the future for gamification? According to the Gartner Group it is onwards and upwards. They predict that by 2015 more than 50 per cent of organisations that manage innovation processes will gamify their procedures. It really is a massive bandwagon, with experts explaining how to avoid law suits when dealing with in-game currency and personal data relating to leaderboards. There are also gamification evangelists explaining how, through the simple introduction of gamification principles, a business can "increase productivity; (use it) as a training tool to help improve performance monitoring, and spur on healthy competition between employees."

Whatever our personal opinions of marketing and sales techniques, and the ethics of creating 'healthy competition' between employees, no one can deny that it is has taken the marketing world by storm, which looks set to continue, for a while at least.

> ***"The sole domain of the publisher has become inhabited by other businesses and brands desperate to associate themselves with video games."***

However, without the help of a crystal ball, predicting the future, especially in relation to technology, is a tricky business. Gamification is being hailed and maligned in seemingly equal measure. From the witty but particularly damning article 'Gamification is Bullshit' by Ian Bogost, the author states that the concept was "invented by consultants as a means to capture the wild, coveted beast that is video games and to domesticate it for use in the grey, hopeless wasteland of big business, where bullshit already reigns anyway."

Whether we agree with this or not, he also points out that gamification only ever co-opts certain aspects of gaming such as points and levels, and of course prizes. Ignoring the much more subtle, magical elements to do with player interactions and behaviours.

THE BIG QUESTION

So, it leaves me with just one final question; how does all this impact on games development? Well, there has certainly been an impact. The huge rise in app development can be seen to be bolstered by big business.

Whilst games like *Angry Birds* are notable for the massive profits they have made, there is no current, sure-fire way of guaranteeing a return from these games. Consequently, whilst hoping for a yacht-supporting blockbuster, many are also attempting to provide a more reliable income by charging for the games they make.

In other words, what was previously the sole domain of the publisher has become inhabited by other businesses and brands desperate to associate themselves with the 'glamorous' world of video games.

Is life a game? If only.

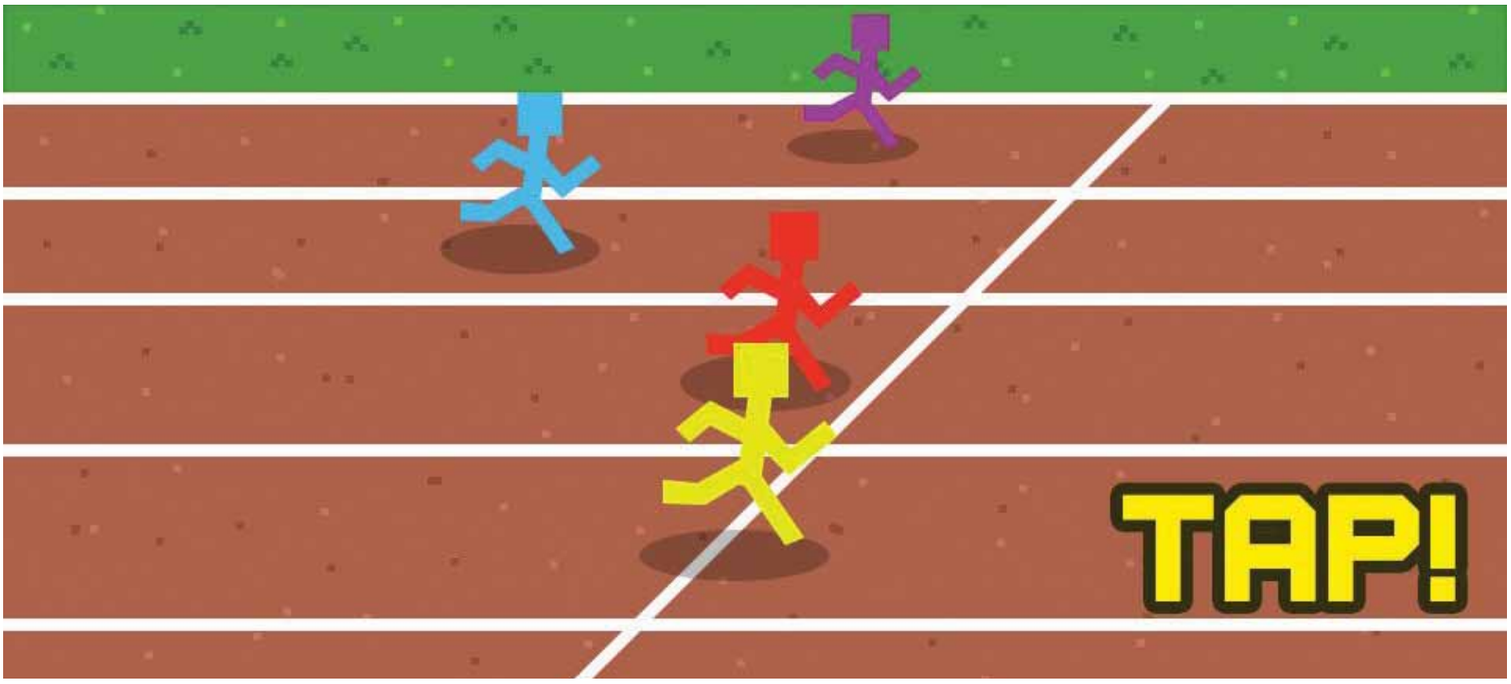
What I would suggest is that gamification is an interesting identification of motivating factors of engagement, and if used appropriately it can be a fun addition.

Ana Kronschnabl is CEO and creative director at games and digital content studio Fluffy Logic, which has produced titles for a wealth of platforms across console, mobile and online. Fluffy Logic is currently at work on social game *UrZoo*. **www.fluffylogic.net**

//COMMENT: MOBILE

Independents must be interdependents

by **Will Luton**, Mobile Pie



The first compendium from the Best of British initiative brings gamers a collection of summer sports mini-games unrelated to the Olympics.

THERE'S A MISCONCEPTION in our industry that everyone is in competition. That we must be clandestine corporations, moving in the dark, masked by NDAs. That we should protect ourselves from each other, in the model of the publisher megacorp.

This is total bullshit. Independent developers aren't in competition, for a simple reason: Someone playing my games doesn't preclude them from playing yours. Count all the games you've played. Is it more than one? I reckon it probably is.

So, how about we tell people that play our game that they might like yours also? If you do the same back, we grow our audience collectively. It's a double win. Let's high-five through the windows of our new Ferraris, high on the smell of our caviar farts.

I've long believed that the community of independent developers (I don't use the term indie) need to do more than jerk off each other's egos on Twitter, but instead self-organise into something coherent that gives power to their collective strength.

COME TOGETHER

The most obvious example of this in action is the bundle. You take a good game you made, offer it up with a load of other good games, chuck in a cleverly orchestrated flexible pricing structure, the worthiness of charity, and, hey-presto, you have an incredible value proposition. It's so good, it's gotten the EA seal of approval. Well, minus the charity bit.

Phenomenally, the bundlers have become interdependent (read that again – it doesn't say independent) to overcome the biggest challenge they face – the perennial visibility problem. *The Humble Bundle* has become a great brand - it has awareness around it and taste maker backing from the likes of Mojang's Notch, creating superstars of its participants.

So about nine months ago, I sat thinking about some old IP, the bundle model and the conspicuous lack of it on iOS. Testing the water, I put out a tweet for interested studios. The response was phenomenal and thus Best of British was born.

> ***"We need to do more than jerk off each other's egos on Twitter, but instead self-organise into something coherent that gives power to our collective strength."***

THE BEST SHOT

BoB was set up to be purely focused on putting out the said bundle, but as we started to drill down to the technical and legal details it became clear that, though possible, it would be a nightmare to put together.

Despite the frustration the group grew, even beyond the bundle being put out of its misery. It became more and more apparent that there were other needs that the member companies had that could be addressed by being together.

People started asking questions about tax to the mailing list. We arranged a conference panel together. Then others started hiring each other and sharing code. We began talking about cross-promotion, pooling contacts and group-buy discounts. Even company mergers have been tabled. We started to work together for the benefit of everyone with BoB as the central focus.

Today the future of BoB looks very peachy. By the time this article is in print its first game, created as a compendium of *WarioWare*-esque mini-games, built in Unity in 48 hours and themed around summer sports (no connection with the Olympic Games), will be in Android and iOS app stores.

If we don't get sued by LOCOG, the app will promote its member companies with links directly to their games, as well as the group itself.

It is something I recommend to all developers. Find your community and do something with it. As trade bodies struggle to be of help to small, young developers, the real benefit can come from each other, even in things as small as moral support or as big as making tonnes of cash. It's all there if we do it together.

BoB is a non-hierarchical, free-to-join volunteer-driven group which meets at 2pm on the fourth Tuesday of every month exclusively for mobile developers. For more information, get in contact via will@mobilepie.com.

Will Luton is creative director at the award-winning boutique studio Mobile Pie. They create delicious own IP and work on licenses, with a partner list that includes the BBC, Orange and Hewlett-Packard. Follow Will on Twitter at @will_luton, or visit **www.mobilepie.com**

//COMMENT: STUDIO MANAGEMENT

Designing the perfect designer

Mike Simpson, The Creative Assembly

WHAT WOULD IT take to be a perfect games designer? Boiling it down to a few simple rules is not easy, but that's exactly the kind of problem game designers have to solve.

A game design has to have both substance and style. Without style the game has no charm and no one will play it. Without substance, there is no game. There are two corresponding types of designer – let's call them Otaku and Jedi.

The Otaku are the game geeks, the engineers, the crafters of substance. Their tools are spreadsheets, metrics and fundamental principles. They deconstruct, analyse, synthesise and reconstruct. They deal in facts and figures, feedback and damping, point and counterpoint, stats and formulae. They don't just understand what works; they know why it works. This allows them to create gameplay that mostly works first time.

Pure Otaku, left unfettered, will produce designs so dry and geeky that no normal human would want to touch them. Players need shallower, shiny stuff to get them thoroughly hooked before the deep geek is released. Enter the Jedi.

Embrace your inner Dark Side and you threaten the very survival of your studio, says Simpson

TURN OF THE JEDI

The Jedi use their powers to conjure up designs, drawing on the spirit of all the entertainment media that ever existed. They wield their opinions like light sabres, cutting down their opponents' ideas and sending forth their own creative outbursts. Subjectivity, style and creativity are their domain, and they are masters of it, iterating their way gymnastically to great gameplay.

Good design requires talent (which you're born with) and skills (which you can learn), but there are very few designers who have equally strong Otaku and Jedi talent – it's the old art vs science, form vs function division. It's unfortunate because the two approaches are so complimentary that they multiply rather than add.

You'd think pairing an Otaku with a Jedi would work well, but they're starting off standing on different planets and they're unlikely to value each other's point of view. 'It's combat mechanics that will make or break the game'. 'No, storyline is the most important thing in the game, combat mechanics are just a hygiene factor'. It's much better to have that argument going on inside one person's head because it takes ego out of the equation.

You can't change your blind watchmaker-given talent, but you can improve your skills, albeit with diminishing returns. To maximise your value if you're an Otaku you should first focus on Jedi skills – take an art or script writing course, play many more games, GM some paper RPGs, consume more culture, lots more. Jedi should focus on Otaku skills – learn to program, embrace Excel, play board games to win, trawl the game metrics and forums, play a few games obsessively and listen to the Critical Thinker podcasts.

Unfortunately, everyone's base value will be compromised to some extent by a whole host of foibles and behaviours caused by strengths that are overdone.

Where a Jedi designer's passion is overdone and he uses anger to win his arguments he becomes a Sith designer.

> ***"Games developer ego may be just great for self-publicity, but it is a complete mind killer that is in every case bad for games design."***

Sith are so dangerous they can threaten the existence of entire studios. Many other designers will back away – sometimes far, far away – and his opinions will end up unfiltered in the game. There is a potential Sith in all of us and it must be kept chained up and locked away.

THE RIGHT STUFF

No one is right 100 per cent of the time and crippled is the designer who thinks he is. Three overconfident designers who are right 90 per cent of the time but can't agree will be outperformed by three self-doubters who are only right 45 per cent of the time, but pick their best answer (Otaku will be reaching for their calculators at this point). Stubbornness will halve your value to the team and put a cap on how far your career can progress.

Both types of designer also need to achieve detachment from their ideas. They have to push their babies out there and let them sink or swim. If you love your ideas too much you'll resist others modifying them, even if it's an improvement, and you may even let loose your inner Sith to defend them.

It's ego that drives stubbornness and attachment to your own ideas. It makes you take more than your fair share of the design discussion space. It makes your own flaws invisible to you. When reality doesn't match your ego's unrealistic expectations it drives inferiority complexes making you over-sensitive to criticism, unable to self-improve and prone to angry outbursts. Ego may be just great for self-publicity, but it is a complete mind killer that is in every case bad for games design. Game this formula and you'll make better games:

*Designer value = (Otaku Talent + Skills) * (Jedi Talent + Skills)*
Ego

Mike Simpson is creative director at The Creative Assembly. He joined the studio in 1996 as studio director, and has since spent much time at the reigns of the developer's lead IP, RTS series *Total War*. This month Simpson stands in for Tim Heaton.
www.creative-assembly.co.uk

THE MONTH AHEAD

A look at what September has in store for the industry and beyond

SEPTEMBER 9TH
London 2012 Paralympic Games closing ceremony.
After a historic month of sport, the Games come to a close.

SEPTEMBER 15TH
Tokyo Game Show 2012.
Delegates descend on the Makuhari Messe to see what's new from the Far East.

SEPTEMBER 21ST
LittleBigPlanet PS Vita.
Touch-based thrills afoot in what could be a must-have for Sony's new handheld.

SEPTEMBER 25TH
Dead or Alive 5. DOA returns to consoles with its mix of dizzying fight styles, 'sensual' graphics and alluring ladies.

CloudGamingUSA

SEPTEMBER 11TH
Cloud Gaming USA.
As interest in this tech rapidly expands, the USA's largest cloud-focused event returns.

SEPTEMBER 15TH
International Day of Democracy. And not just in a political sense. Breakdown studio structures for a day.

SEPTEMBER 21ST
Borderlands 2. The follow-up to Gearbox Software's surprise chart-topper is out. Dubstep gun, anyone?

SEPTEMBER 28TH
FIFA 13. Just in time for the footy season, this year's *FIFA* arrives with another set of tweaks to its winning formula.

SEPTEMBER 14TH
To Rome With Love.
Woody Allen's copious output continues with this anthology of romance.

SEPTEMBER 19TH
International Talk like a Pirate Day. Ahoy! Expect acts of not-so-innocent tomfoolery in pursuit of rum and booty.

SEPTEMBER 21ST
International Day of Peace.
Forgetting that another shoot 'em up is out this very day, let's take a moment to reflect.

SEPTEMBER 28TH
Resident Evil: Retribution.
More zombies, more Milla Jovovich and more ways to die in the fifth Resi movie.

DEVELOP DIARY

Your complete games development event calendar for the months ahead

DEVELOP QUIZ
September 19th
London, UK
www.develop-online.net/events

The industry's finest are coming together once again to let their hair down at this autumn's Develop Quiz.

Teams from Microsoft, Unity, Bossa and more will seek to be crowned trivia kings and queens of the gaming circuit. Fantastic prizes and booze-fuelled question-answering await the teams attending.

The Develop Quiz will take place on Wednesday, September 19th at the Sway Bar in Holborn, London.

Look out for more pub quizzes from Intent Media later this year.

SEPTEMBER 2012

CLOUD GAMING USA 2012
September 11th to 12th
San Francisco, USA
www.cgconfusa.com

DEVELOP QUIZ
September 19th
London, UK
www.develop-online.net/events

TOKYO GAME SHOW 2012
September 20th to 23rd
Tokyo, Japan
tgs.cesa.or.jp/english

F2P SUMMIT 2012
September 26th
London, UK
www.f2p-summit.com

WOMEN IN GAMES CONFERENCE
September 26th
London, UK
www.womeningamesjobs.com

OCTOBER 2012

APPS WORLD EUROPE 2012
October 2nd to 3rd
London, UK
www.apps-world.net/europe

MCV / XBOX 360 PUB QUIZ
October 4th
London, UK
www.mcvuk.com/events

BRAZIL GAME SHOW 2012
October 11th to 14th
São Paulo, Brazil
www.brasilgameshow.com.br

GAMES MEDIA AWARDS 2012
October 18th
London, UK
www.mcvuk.com/events

GAMECITY 7
October 20th to 27th
Nottingham, UK
www.gamecity.org

NOVEMBER 2012

LAUNCH CONFERENCE 2012
November 13th to 14th
Birmingham, UK
www.launchconference.co.uk

MONTREAL INTERNATIONAL GAME SUMMIT 2012
November 13th to 14th
Montreal, Canada
www.mtldgtl.com

LONDON GAMES CONFERENCE 2012
November 21st
London, UK
www.londongamesconference.com

DECEMBER 2012

MOBILE GAMING EUROPE 2012
December 6th to 7th
London, UK
videogamesintelligence.com/mobile

Reach a new level...

develop INDUSTRY EXCELLENCE AWARDS WINNER '12 RECRUITMENT

with Amiqus specialist recruitment solutions

Amiqus provide specialist recruitment solutions for the Console, Social and Mobile Games Industries across 20 countries. Discover a global network of talent at amiqus.com or call 01925 839700

amiqus
Recruitment specialists for the games industry

» Develop 100: The top ten US studios

A rundown of the country's best developers

AS THE 2012 *Develop 100* continues to generate conversation throughout the industry, our monthly round-up continues.

This month we look at the top ten US studios, and how the country has swept aside worldwide competition and accounts for just under half of the top 20 studios.

Out on top, unsurprisingly, are Infinity Ward and Sledgehammer Games, with the barmstorming success of Activision's blockbuster franchise, and in particular *Call of Duty: Modern Warfare 3*, shooting these developers up the list as the country's elite.

They were followed closely by Bethesda Game Studios, which garnered £40.15m in UK sales for 2011 from its fantasy RPG *Skyrim* making up the bulk of its earnings.

Pipeworks, Epic Games, Volition, Treyarch, Turn 10 Studios and Naughty Dog rounded off the US domination of the top 20.

The Sims Studio just missed out on creating a perfect ten for the country, earning £13.71m for 2009 release *The Sims 3* and its expansions.

Altogether, US developers brought in an astounding £327.62 million in UK retail revenue during 2011.

Develop 100 is an iPad-exclusive book, available at £4.99 via the *Develop* iPad app. A second edition due this autumn, and free to existing users, will feature the top titles as chosen by games critics.

» Profile: Rockstar San Diego

Develop 100 Position: 53 | **Founded:** 1984 (as Angel Studios) | **Location:** San Diego, USA | **UK retail revenue in 2011:** £6.6 million | **www. rockstarsandiego.com**

WHILE THE WESTERN genre in cinema isn't quite what it used to be, thanks to Rockstar San Diego the setting is making a bigger impact than ever in the world of games.

Rockstar's knack for aping Hollywood once again shone in *Red Dead Redemption*, which has garnered critical acclaim and become a modern classic in the space of two years.

Protagonist John Marston's tale of betrayal and bounty hunting enticed a wealth of pundits, becoming one of 2010's super-hits. Continuing to sell throughout 2011, it has assured Rockstar San Diego a place on the list.

Not bad for a studio that previously had *Midnight Club* and a Rage-powered table tennis game to its name.

» ANALYSIS: NINTENDO'S OUTLOOK

TAKE A LOOK across our *Develop 100*s over the past years, and it is clear Nintendo's revenues have dipped significantly from the highs of £200m in the 2010 *Develop 100*, to £68.07m in UK retail revenue during 2011.

Sales did remain strong in 2011 for Nintendo. The gaming giant released *Super Mario 3D Land* on the 3DS last November, garnering £9.56m in UK retail sales, while *Zelda: Skyward Sword* struggled to gain real traction, earning £5.99m in the run-up to Christmas.

A fallow year for Nintendo puts it at No.3. That's not to be sniffed at, but it is a long way from the heady highs of a No.1 place in 2010 off the back of very strong revenues.

This is Nintendo during a transition year. Output is low as its developers work on new formats, and those new platforms don't have huge install bases yet. Its bestselling game is for 3DS, the lauded *Super Mario 3D Land*.

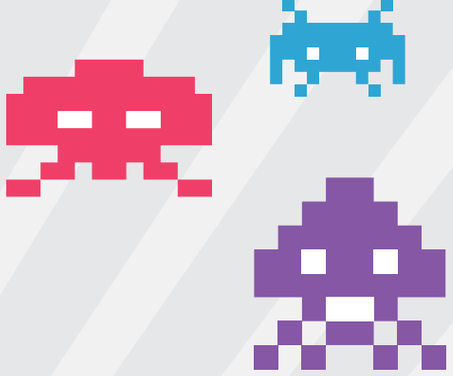
All its other big titles are for Wii, the best-sellers previously described by Nintendo bosses as 'evergreen'. But these games are hitting their limit and are on the cusp of market saturation.

Take *Wii Sports Resort*, which made £29.6m in revenue during 2010, but only mustered £5m in 2011. Again, not to be looked at with a disproving eye. Other studios would kill for a *Wii Sports Resort*, let alone dream of a *3D Land*.

Want to know more? Nintendo's entry in the full *Develop 100* 2012 includes a wealth of extra information – and there are dedicated profiles for each of the studios in the top 100.

Want to know more? The *Develop 100* is now available for £4.99 within the *Develop Magazine* app for iPad. Download the *Develop Magazine* app now through the iTunes store.

I could've developed a Windows 8 game, but I took an arrow to the knee



Don't get caught out.

Find out about developing or porting your game apps for the next generation of Windows and Windows Phone at

ubelly.com/gaming

CryENGINE® 3 – The complete game development solution.

CryENGINE® 3 is the first PC and console game development solution that is next-gen ready with scalable computation and graphics technologies. It's also the only game engine that provides multi-award winning graphics, state-of-the-art lighting, physics and AI, out of the box – enabling you to start the development of your next generation games now!

The CryENGINE® 3 Sandbox™ editor is a production proven, real-time tool suite designed and built by AAA developers, while CryENGINE® 3's powerful real-time renderer is now even better thanks to DirectX 11 support that significantly enhances the capabilities of the renderer and enables unparalleled visuals.

CRYENGINE® 3

www.mycryengine.com

© 2012 Crytek GmbH. Crytek and CryENGINE are registered trademarks or trademarks of Crytek GmbH in the USA, Germany and/or other countries. All rights reserved.

BETA

DEVELOPMENT FEATURES, INTERVIEWS, ESSAYS & MORE

Behind the scenes at Blitz
p31

A tower of strength

London's development scene is once again a global powerhouse. We bring you an A-Z of the studios and companies that define the city. p20-23

Inside Preloaded
p24

The New Star Soccer story
p27

LONDON: AN A-TO-Z

As one of the world's most iconic cities, London needs little introduction. But with The Olympics almost a fading memory, it's time to focus on the UK capital's other games; those made by one of the most diverse and innovative development scenes on the planet. From A through to Z, over the next four pages we bring you a guide to all the studios making London matter

Left-to-right: Hide & Seek's games in action, Air-Edel's famed sound studio, Mind Candy's colourful office and the SCE London team

A With tech giant **Autodesk** (www.Autodesk.com) having a presence in central London's Soho area, and **Amazon** (www.amazon.com) poised to set up a new 'interactive entertainment' office in London (*see pg 6*) with a view to making content for console, mobile, PC and TV platforms, it's clear – as our alphabetic guide kicks off – big fish, to which the games industry is but one concern, see the value the city offers.

But equally important to London's vibrant developer ecosystem are the likes of **Air-Edel** (www.air-edel.co.uk), an Ivor Novello-winning audio production and services house with a wealth of experience in movies and games.

B Moving on a letter, London's knack for attracting and fostering creatively bold indie talent becomes clear. For example, there's *Plain Sight* studio **Beatnik Games** (www.beatnikgames.com), multiplatform developer **Big Head Games** (www.bigheadgames.co.uk), and mobile and online outfit **Big Pixel** (www.bigpixelstudios.co.uk).

It is London's **Bossa Studios** (www.bossastudios.com), however, that serves as one of the city's most popular studios today. Bossa may not be indie – it is owned by Shine, in turn the property of Newscorp – but it has done a great deal to earn respect on the global games development stage.

And it should not be forgotten how important London is to non-UK companies; German browser-giant **Bigpoint** (www.bigpoint.net) has even established a satellite office within the border of London that is the M25.

C As with Bigpoint, Chinese MMO developer **ChangYou** (www.changyou.com) has a London presence, this time in Hammersmith, demonstrating the capital's ability to serve as an outpost for Europe in its entirety.

Elsewhere **Curve Studios** (www.curve-studios.com), the fiercely creative independent behind *Explodemon* and *Stealth Bastard*, calls the bustling metropolis a home. Meanwhile Polish developer and publisher **City Interactive** (www.city-interactive.com) uses North London to house one of its games making operations.

D Founded by former programmer and mathematician Julien Hofer (*above*) way back in 1991, **Datascope** (www.datascope.co.uk) serves as one of the most prolific, longest serving video games recruiters active in the sector today.

Initially concerned exclusively with programming jobs, now Datascope secures talent for positions in art, design, development, animation, management, marketing, PR and sales jobs. The recruiter also covers the realms of web design and Java, Flash and PHP jobs, and has expanded from its London home to establish a US office. Serving a number of countries, Datascope supports roles in Canada, Australia, New Zealand, Japan, China, India, France, Spain, Germany, Austria, Holland, Russia and the rest of Europe.

Focused on the synergy it recognises between games, mobile entertainment, online gaming and internet careers, Datascope strives to offer a comprehensive service for candidates both in its home town of London and across the UK, Europe and the world.

Another studio that typifies the spirit of London's dev scene is **D La La** (www.dlalastudios.com), an independent formed 'to stick it to the man by becoming the man', and currently at work on a Windows 8 title.

E Again proving the diversity of London's games development ecosystem, **Escape Studios** (www.escapestudios.com) serves as both a CG-focused training academy and software and hardware vender. Elsewhere Newcastle-founded studio and 'triple-A browser' innovator **Eutechnyx** (hwww.eutechnyx.com) has proved the allure of the capital can even overcome the UK's long-standing North-South cultural rivalry.

F RTS and MMO focused developer **Firefly Studios** (www.fireflyworlds.com), smartphone and tablet specialist **Future Games of London** (www.futuregamesoflondon.com), most famous for *Hungry Shark*, add to the list of smaller teams that have made London a hotbed for indies. **The Foundry** (www.thefoundry.co.uk), meanwhile, uses its location to create visual effects tools used across the world.

G That **Google** (www.google.com) has a UK HQ in Victoria is little surprise, but its seven floor base in East London designed to host hackathons and offer office space to other tech outfits prove's the organisation's faith in the city. Further south, **Goldsmiths University of London** (www.gold.ac.uk) is becoming a significant educational contributor for the nation's games sector, while back in the city's East End **GREE** (corp.gree.net/uk/en) is establishing a 100-storng dev and admin team *(see pg6)*.

H **Hide & Seek** (www.hideandseek.net) is one of a number of London studios pushing the boundaries of 'games development', in this case by crafting games designed for public spaces, while **Headstrong Games** (www.headstrong-games.com) burns the torch for family and triple-A titles as part of the Kuju studio family. **Honeyslug** (ww.honeyslug.com), meanwhile, has made a name for itself with unusual games such as Vita title *Frobisher Says*.

Proving there's still life in casual games development, indie **Icon Games** (www.icongames.com) continues to make a mark on the space, while **Ideaworks** (www.ideaworksgamestudio.com) is behind both a number of portable titles and the popular cross-platform SDK Marmalade. London's **Imperial College** (www3.imperial.ac.uk) now offers well regarded games training, but it is Paulina Bozek-led social studio **Inensu** (www.inensu.com) that remains one of the city's most exciting games-related outfits.

Long-standing development giant **Konami** (uk.games.konami-europe.com) is not the only dev to have established a new base in the capital this year (*see pg 6*). Back in May casual and 'skill gaming' giant **King.com** (www.king.com) opened the doors to its London studio, lead by Playfish's former development director.

Half-way through the alphabet, there's a number of London's most innovative and closely watched studios. Michael Acton Smith's **Mind Candy** (www.mindcandy.com) has turned *Moshi Monsters* into a merchandising and toy industry phenomenon, Alice Taylor's **Makie Lab** (www.makielab.com) is mixing 3D printing, customisable dolls and social game concepts, and **Mediatonic** (mediatonic.co.uk) deftly mixes client and commissioned work with its own distinctly witty IP. And, of course, there's the mysterious new **Microsoft** studio *(see pg 6)*.

Born from an Oxfordshire animation tool outfit this year, **NaturalMotion London** (www.naturalmotiongames.com/london) is set on pushing forward the company's success in the mobile games development space.

Voice recording specialist **OM** (www.omuk.com) has made a unique home in its King's Cross studio, where its tailored approach to casting, script, directing, recording, post-production and localisation saw it capture voicework for *Driver San Francisco's* sprawling cast.

Indies return again for the letter P, with **PLA** (www.plastudios.co.uk) and **Preloaded** (www.preloaded.com – *see pg 26)* specialising in client work and educational content. Similarly **Playerthree** (www.playerthree.com) has made a habit of producing branded games, while **PlayMob** (www.playmob.com) started life as an ordinary developer before evolving into a specialist in pairing charities with gaming projects. **Plumbee** (www.plumbeegames.com), meanwhile, specialises in social casino titles, having spun out of EA-owned **Playfish** (www.playfish.com), the social powerhouse behind *Pet Society* and *Restaurant City*. Elsewhere in the city **Playjam** (www.playjam.com) offers a globally spanning platform and SDK for social and casual gaming on smart TVs, and **Pitstop Productions** (www.pitstopproductions.co.uk) delivers a wealth of production services, from audio and animation work to localisation and project management.

Proving London remains a hotbed for audio talent, **Richard Jaques Studio** (www.richardjacques.com) – led by its eponymous founder, has established itself as a leading composer of triple-A game scores. Also contributing to the city's influence on high-end gaming is Develop Award-winning **Rocksteady Studios** (www.rocksteadyltd.com), internationally regarded for its work on the *Batman: Arkham City* and *Batman: Arkham Asylum* games.

Pitching itself as 'the biggest Microsoft Studio you never knew existed' **Soho Productions** (www.microsoft-careers.com/go/soho-productions/343331) was founded in 2008 as Xbox Live Studios Europe. Rebranded in 2011, and based in the heart of London's vibrant Soho neighbourhood, its focus is on creating 'two-way TV experiences'.

Its mission to reinvent TV began with the creation of Sky and Canal+ players for Xbox. Presently working with leading entertainment partners to create experiences not bound by the definitions of television or gaming, the team is also behind the ambitious *Kinect Sesame Street TV* project.

Led by industry veterans and currently looking to recruit talent for a number of positions, Soho Productions houses some 60 staff, and describes its position in the UK capital's iconic centre as 'one of the greatest neighborhoods in the world'.

The letter S also brings us Sony's **SCE London** (www.worldwidestudios.net), *Football Manager* outfit **Sports Interactive** (www.sigames.com), character specialist **Slide London** (www.slidelondon.com), automotive experts **Slightly Mad Studios** (www.slightlymadstudios.com), *Enemy Territory* developer **Splash Damage** (www.splashdamage.com), CG outfit **Spov** (www.spov.tv), own IP and branded content experts **State of Play** (www.stateofplaygames.com), game and tech design operation **Strongman Games** (www.strongmangames.co.uk), own-IP indie **Supermono** (www.supermono-studios.com) and production house **Side** (www.side.com).

London's leading eccentric studio Ustwo, where staff take many forms

Testronic Laboratories (www.testroniclabs.com) takes the letter T all to itself. Offering testing and QA services across games, film and television, it serves to better hardware, software and websites, as well as offering consulting services.

Concluding our pan-metropolitan round-up, **Zattikka** (www.zattikka.com) combines development and publishing, and is establishing itself as a trusted casual studio and branded games specialist.

Famous for spending £150,000 on iOS game *Whale Trail*, East London UI outfit and dev **UsTwo** (www.ustwo.co.uk) is also the home of the charismatic, slightly eccentric co-founder known as Mills, renowned for containing his desk in a pink wendy house.

As well as crafting *Whale Trail*, UsTwo has also built UI for mobile phone front-ends, and has worked on a Google TV game with Sony.

Sound design and audio post-production outfit **Wave** (www.wavestudios.co.uk) deserves special mention as one of London's most ambitious games service outfits. Starting out in TV, film and radio, and having a wealth of awards from every industry it serves to its name, Wave moved on the games sector back in 2010, and has since developed a reputation as an innovator and high-end service provider.

Its London studio – partner to an Amsterdam outfit – counts among its facilities eight dubbing studios, and a sound library of over 500,000 effects.

Recently it worked with animation outfit Cubic Motion to demonstrate how top quality facial animation really can be created via a simple extension to the voice over process, and increasingly it is establishing a reputation within the developement sector as one of the most proactive games audio service providers.

Based in the centre of London, Wave will likely be a name you'll see much more of in the coming years.

Also staking a claim to our W section, **We R Interactive** (www.werinteractive.com) blends elements of games, TV production and filmic narrative to create distinct social games such as *I Am Playr*.

Top-to-bottom: London's Tea Building, currently home to Ustwo and Mind Candy, a new creation from Makie Lab, and the iconic London Eye

Preloaded with purpose

Preloaded is a studio unlike almost any other. Based in the heart of East London, its games have ambitions beyond entertainment, and now it has its sights on America. **Will Freeman** investigates

IN THE CITY

Preloaded's Old Street studio, nestled in the heart of East London's development hub

PRELOADED HAS MADE a home for itself in London, surrounded by others that have made the city's east-of-centre area a globally recognised tech hub.

"There is a sense of community in London, with plenty of initiatives designed to encourage meeting, socialising, sharing ideas and creating new alliances," offers Preloaded creative director Phil Stuart. "You really need to be based hereto be able to benefit from that. Being based in London also means we are in the same city as some of our biggest clients. It also provides the perfect springboard for an increasing spread of international work in the US, the continent and the Middle East."

WHILE IDEAS LIKE educational games have long since shaken off the stigma they once carried, the pairing of entertainment and learning is still a science in its early stages.

Bringing together meaningful content and unbridled fun is a tricky business. It's also potentially financially rewarding, but so far few studios have perfected the art.

> ***"The minute you start toning the purpose and educational content down – that's when you make a game no one wants to play."***
>
> Phil Stuart, Preloaded

Yet down a surprisingly quiet side street in an ex-industrial building in the heart of East London's new creative hub, the alchemy of 'games with purpose' is being perfected.

A strong-armed stone's throw from Mind Candy, Ustwo, and Bossa sits Preloaded, which, with little fanfare, has turned making games with a message into a refined, critically acclaimed and profitable process.

Sharing the helm at Preloaded is Phil Stuart, an enthusiastic, upbeat and bright creative director who apparently cannot wait to share his company's findings with other studios. The building he works in may be typical of the area – packed with geek antiques, board games and fashionably dressed staff – but what Preloaded practice is quite distinct.

GAMES WITH PURPOSE

The term 'games with purpose' is many things to the developer. It is a self-coined mantra, an ideal and a business opportunity. Its meaning? Games that not only deliver entertainment, but also learning, meaning and message; all without sacrificing their ability to enthrall. Games with purpose are about learning, but they must always be fun. The likes of the Disney, Turner Broadcasting, Channel 4 and London's Science Museum have all worked with Preloaded, and as such Stuart and his team have a wealth of experience.

"We always ask ourselves 'How do you design a game with meaning and purpose?'"

offers Stuart. "I'd almost say that's our thing here at Preloaded. We see that process as something of a balancing act. That's how we make games.

"We've got fun in one hand and content in the other, and the challenge is balancing those two. We have to deliver a really fun experience, and simultaneously maintain the integrity of content. That matters most. The minute you upset that balance – the minute you go too hard on content, or start toning the purpose and educational content down – that's when you make a game that nobody wants to play.

The minute you start to diminish either content or the fun of playing the game is the minute you start to fail to answer the objectives it originally set out to meet. It's tricky, but here we try and find game mechanics that in themselves embody the content."

DELIVERING MEANING

Founded in 2000, Preloaded almost stumbled upon its niche by accident. Previously the studio's energy has largely fuelled commission work, when early contracts for the BBC opened its mind to the power of games to deliver meaning.

Currently employing 20 staff, in 2011 Preloaded titles accumulated over 70 million plays, all without spending a penny on marketing games. It has a BAFTA to its name, SXSW awards, and a Develop Award nomination.

Today the studio is also expanding its horizons, continuing to do commission work, but opening its eyes to commercial opportunities.

"Our future is maybe becoming more commercial, and we're starting to consider different options, different funding opportunities and various entities, and we're looking beyond just the UK now," reveals Stuart.

"It comes from a desire to work in different spaces. There is a difference between commercial and non-commercial games in terms of the types of gameplay you can put in them, and I think we're just keen to broaden what we do and the kinds of games we make. It's not really a specific reaction to the changes in the industry, or the current state of games development."

And it is that attitude – that confidence in spaces less than familiar – that makes Preloaded one of London's many atypical games makers.

Preloaded is not a triple-A powerhouse. Nor is it a kooky indie. It isn't greedy for limelight, and yet it has the attention of giant organisations. It tackles challenging projects and themes that are no easy sell to consumers, and it is showered with accolades from outside of the games space, such as the Royal Television Society Awards. Preloaded also serves as a consultancy, publishing strategist and data-analyst.

Like Mind Candy, Inensu and Makie Labs, Preloaded is hard to contain within any typical studio conventions, and it is financially successful and well regarded.

WHO SHARES WINS

Preloaded is also a studio not afraid to wear its heart on its sleeve with regard to its devotion to analytics and games theory. The developer doesn't recoil at concepts like design by game models – or 'shapes', as they call them – and refreshingly they are keen to share their findings.

Preloaded's own blog occasionally serves as a promotional tool, but mostly it offers a wealth of data and information on design, publishing methodology and player retention. And it provides just a glimpse of Preloaded's obsession with design through games theory.

"We do think of ourselves as very organised, and we try to run a very tight ship," says Stuart. "We have a lot of method here. To be honest, I'd like it if people thought of us as a thinking person's games studio. We've all read a lot about games theory, and we really do study it. Making games here is a passion, but it's also a slight obsession. We want to theorise and experiment. That's where interesting stuff comes from.

"Analysis and the thinking that goes into a game is what makes the product that comes out of it. We're not trying to just make fun games. Not that just concentrating on fun is easy; it is hard. But making a fun game with meaningful content inside it is really hard, and that's what we thrive on."

And when a game is as much about content as entertainment, Stuart argues it can be harder to make adjustments. If an in-development title is purely designed to entertain, then shortcomings can be easily tweaked and the structure and implementation remains relatively flexible.

> ***"When you can find that meeting point where game and content comes together, it's perfect for games with purpose."***
>
> Phil Stuart, Preloaded

When content is as important as fun, however, game design changes must always respect the integrity of content. In this context, structure is less malleable, especially when most titles with purpose attempt to translate real world concepts. In Preloaded's creations, in space, nobody could hear you scream.

That respect for reality might terrify most sci-fi triple-A action games developers, but it's what keeps Preloaded chomping at the bit to create more games. And the studio's enthusiasm is something others curious about making meaningful titles could learn from.

"You can't fight the content," says Stuart. "The game has to emerge out of it. If you start to try and battle with it, you quickly realise the game design never really met with the content in the first place. But when it goes well, it's great to see. *Launchball*, which we did for the Science Museum to teach kids the basics of physics, was a really great example. The game and content just blended beautifully. When you can find that meeting point of where the two come together, it's perfect for games with purpose. And to find that point you have to be analytical about it."

STATES OF MIND

Looking forward, Preloaded, which specialises in Unity and Flash development, has a keen eye on new markets and business models. It is investigating advertiser funded and microtransaction titles, and is poised to wow the USA with its concept of games with purpose.

"We're incredibly ambitious and we're sure the way we approach making games is unique. For some time around 80 per cent of our work is commission-based, and the remaining 20 per cent is joint ventures and self-funded stuff. We'd like to up that 20 per cent, and that's a real focus for us going forward for the next year or two." ■

www.preloaded.com

PRELOADED'S GAMES

Preloaded has crafted an impressive number of titles. Here we highlight some of the best, past and present

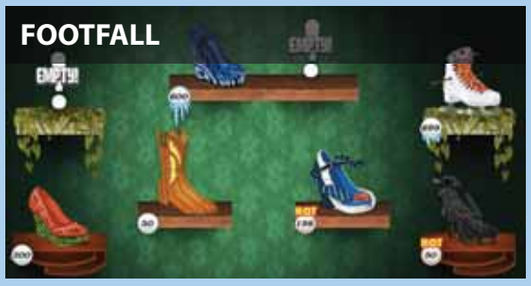
WONDERMIND

Crafted for an exhibition by the UK's internationally renowned Tate Liverpool, *Wondermind* used metaphor and the fiction of Lewis Carroll to help children understand core aspects of neuroscience, including neural plasticity, spatial cognition, memory and language.

ZOMT

Made for US sometimes-purile mature humour emporium Adult Swim, *zOMT* is perhaps Preloaded's most popular title with traditional gamers. A side-scrolling strategy game, it debuted on browser, and is due to head to iPad.

FOOTFALL



Commissioned by UK broadcaster Channel 4, *Footfall* set out to explore concepts of financial literacy and entrepreneurship. It charges its players with running a small shoe shop, and was designed to demonstrate the social, environmental and financial impact of a start-up.

SUPERSIGHT

Pitched as a 'micro-action-adventure game', *SuperSight* is a multiplatform release due for Android, iOS and browser imminently at the time of writing. Part of the *SuperMe* suite of games made with Somethin' Else and Coney, it explores human emotions and notions of personal enlightenment.

datascope RECRUITMENT

our expertise: your development

Europe's leading multi-award winning games industry specialist is based right in the heart of

70 minutes from Leamington Spa

10 minutes from Old Street

LONDON

45 minutes from Guildford

5 minutes from Soho

45 minutes from Brighton

With our specialist consultants building companies since 1989 and one of the largest candidate databases in the world, we're perfectly placed to provide you with the very best talent in the industry

facebook.com/DatascopeRecruitment
twitter.com/Datascope
Datascope Games Jobs

+44 (0) 20 7580 6018
109 / 110 Bolsover Street, London W1W 5NT, UK
datascope.co.uk
info@datascope.co.uk

opm jobs.com recruitment
programming
dev management
test and translate
commercial
creative

Associate member of ukie

FINALIST develop

Rubbish at sport?

You can still get picked for London.

Experienced Games Industry Programmers – London – ref 16153
Team working on exciting console games. Strong C++ and Object-oriented design skills essential.

Senior VFX Engineer – Games Developer – London – ref 16188
One of the biggest Games developers/publishers. Need to be fluent in C++ and C#.

Javascript Engineer – Casual Games – London – ref 16126
Looking for an exceptional developer to build out the JavaScript platform that underpins all of their games.

Tools Programmer – .Net/C#/C++ – London – Games – ref 15836
Work on a newly developed high-performance cross-platform game editor for a prestigious London studio.

To find out more or apply, give our friendly specialists a call or visit our website.
T: +44(0)1206 21 44 21 | www.opmjobs.com

develop Winner 2006

develop WINNER

PLACING PROFESSIONAL PEOPLE IN PROFESSIONAL PLACES

A league of his own

A true bedroom coder, Simon Read has developed one of this year's biggest successes on mobile. **Craig Chapple** catches up with the talented independent games maker to talk creating hit series New Star Soccer

THE QUIET VILLAGE of Bicestor may not be synonymous with the games industry's most famous names, yet it is this British town that is home to the developer behind one of this year's biggest successes on mobile.

A true indie sensation in in a world where such descriptions are bandied around too much, *New Star Soccer 5* has been downloaded more than one million times on iOS, and has garnered three million plus monthly plays on browsers via Flash.

New Star Soccer is a 2D football game where users start out as a 16-year-old athlete trying to become a sporting star. Players can take part in matches, participate in interviews and sign sponsorship deals, whilst they can also take on the glamous lifestyle of a modern footballer and buy cars, houses, gamble at the casino and even take bribes to throw matches.

TRAINING UP ALONE

The game's creator, Simon Read, who operates under the developer brand of New Star Games, started off making the *New Star Soccer* series ten years ago, back before the resurgence of the indie scene, inspired by his passion for football and classics such as *Football Manager*, *Kick Off* and *Sensible Soccer*.

Armed with an English Literature degree from university and a love for programming, Read decided to teach himself the intricacies of coding by purchasing books under his own steam and studying the art of games creation by himself, harkening back to his younger days learning BASIC on the ZX Spectrum.

> ***"I wouldn't say I was a very good coder. I just get stuff to work and if it does then I'm okay, and I move on to the next challenge."***
>
> Simon Read, New Star Games

"After leaving university I didn't really know what I wanted to do, but I always loved programming," he says.

"It had been a while since I had got into coding, so I got some books and started learning again, just C and C++. I started working on *New Star Soccer* on PC, and over the last ten years it's been building on that, with me learning as I go.

He jokes: "I wouldn't say I was a very good coder. I just get stuff to work and if it does then I'm okay, and I move on to the next challenge."

Ten years later, having started out creating a little game called *World Cup Manager* before *New Star Soccer*, and after steady success on the PC for his leading series, Read is now comfortably well off. (*See sales breakdown overleaf for full info*)

BECOMING A GALACTICO

Read jokes that he could afford a Ferrari from the money he has made from *New Star Soccer* on mobile – a lifestyle which so many indies dream of. Although, his most immediate concerns are moving out of his two bedroom apartment in a multistorey building and into a new house with his wife, Lucy – who is also director of New Star Games – and four-month-old son, Matthew. ▶

From humble beginnings to the big leagues. Simon Read has been developing New Star Soccer for more than ten years.

Self-taught coding and a love of football have rewarded Simon Read with finanical success

He says that had his circumstances been different, he'd have looked to perhaps invest in setting up a small studio, a plan which he may come back to in future.

But why didn't Read go the traditional route of joining a studio with his new found development skills and make his way through the ranks to become the boss man?

"I guess I didn't really have an ambition to do it," he explains. "It was just fun to do as a hobby, but I don't feel I have the qualifications. I actually went for different interviews over the years. One was with EA Sports after I launched *New Star Soccer 3*. They wanted to get me over to Vancouver to work on *Total Club Manager*. I had this interview with them and it went absolutely disastrously and I didn't hear anything back from them.

"That was kind of a confidence-shattering experience, but I was happy working alone. I could control the whole project myself and include the features I wanted, and I prefer that. I've always just wanted to have complete control. I've never really had any desire to join a developer."

For Read at least, it was luck that he didn't get the *Total Club Manager* job, given development on the franchise ended in 2006.

And in true indie style, Read has made much of the *New Star Soccer* series on his own, expanding on the database he has steadily built over the years. Although he admits that he has had to bring in other people to help work on the game's database, translation into multiple languages and artwork, the coding itself is still handled by Read alone.

In fact, working alone is something Read recommends other aspiring developers to give a try, although it can often depend on the person whether that is the route for them.

> ***"I was happy working alone. I could control the whole project myself and include the features I wanted, and I prefer that."***
>
> Simon Read, New Star Games

"I would recommend people try it," he says. "I guess other people need a team around them. If I could do everything I would, but there are certain elements I need to delegate. But yes, it depends on the person.

"I think developers should give it a go though. It's so easy now to use languages like Unity or Monkey, and build for mobile or Flash or PC and Mac, so just try it. But it's not easy, it takes time to learn what works and what doesn't, and lots of people find it hard to finish a project."

THE BIG-MONEY MOVE

Taking his longstanding game to mobile was simple he says, using the Monkey games programming language – which can be translated into a number of coding languages such as C++, C#, Java, Javascript and Actionscript – to make a few minor changes and then release *New Star Soccer* onto both iOS and Android, where it instantly put Read on the map as a development star.

The game is free to download and play on iOS for up to ten matches, with the career mode unlockable for 69p. It's a technique which has seen the game downloaded 1,111,725 times, with 429,067 of those users purchasing the career mode. The title also uses other in-app purchases to help career development and can cost up to £9.99, which have been bought an impressive 147,508 times, approximately ten per cent of overall users.

The Android version meanwhile adopts a simple pay upfront model. As Read explains there was not ready-made plug-in available to easily introduce an in-app purchase module similar to the one used on iOS.

He says that rather than spending another month or so he decided to use the situation as an experiment to see what was more popular. But this decision he says, in retrospect, was a big mistake, with the iOS release outselling its Android counterpart by ten-to-one.

New Star Soccer 5 offers players a huge range of activities, from the beautiful game to a celebrity lifestyle

"It's doing well on Android. It's been Top Five in the paid charts, but it's still nothing compared to Top Ten on iOS," he says. "Whether that's purely down to things like piracy and free-to-play or it's more to do with the amount of people that are actually using iPhones compared to Android I'm not sure.

"But the fact is I think going free-to-play is definitely the future for my next project and future games."

The problems Read mentions about Android, which many other developers have suffered from, including *Football Manager* studio Sports Interactive, have also plagued his own game, despite its affordable price and indie appeal.

"I think there's a problem with piracy on Android, definitely," he says. "I see so many links to the APK on different blogs and forums, which is just impossible to combat so I don't really try. I think that's a huge factor."

Despite the negative experience of the smartphone platform, he says this hasn't put him off releasing on Android in future. He plainly states: "it still makes money".

STEAM TRANSFER SAGA

As for other platforms, Read is currently looking at the potential for the game to release on Vita some time in the next few months, given the Monkey engine's recently released adaptation for the handheld. Although, Read admits he's yet to see how viable this would be. He says, however, that he is unlikely to release the game on console, as he feels iPhone "will completely burn away every other platform".

Read is also attempting to expand the reach of the PC version of *New Star Soccer*, which can be downloaded for free and later upgraded with a paid-for premium package to unlock the full game.

However, Read explains that his attempts to bring the hit title to Steam have been less than fruitful, having received a surprise rejection after his initial submission.

He says, however, after some industry friends put in a word to Valve, the game has now been accepted, although it is still awaiting release on the *Portal* studio's ubiquitous digital distribution platform as he works out a few of the game's kinks and localisation issues.

> ***"I think there's a problem with piracy on Android. I see so many links to the game's APK, which is impossible to combat."***
>
> Simon Read, New Star Games

"I resubmitted the game a few months after the initial submission and this time they were happy to accept it," he says. "I don't know if there was any favour on my part there but they've accepted it. I tried to get it ready in time for the Euros but it didn't happen, so now a friend of mine is updating the database and we will launch it quite soon.

"I've got to chase Steam a bit further to try and get something sorted because it wasn't working on the Mac client, so as soon as that's fixed we're ready to go."

Read is now looking at other potential games, and has ambitions to release a new title every six months. Currently prototyping *New Star Tennis* and considering ideas for *New Star Chairman*, this is one indie who you will hear plenty more of in the years ahead. ■

www.newstargames.com

BREAKING DOWN SUCCESS: NSS5 SALES

iOS
Total downloads (free): 1,111,725 (64.5 per cent UK)
Career mode (69p): 429,067
Other in-app purchases (69p – £9.99): 147,508

Android
Total downloads (£1.99): 38,571 (69.9 per cent UK)

Web (Flash)
Monthly plays: 3m+

Desktop (PC/Mac)
Total registered players: 243,031
Monthly active players: ~5000

stainlessgames

World-leading developer of console and PC download titles

X360 | XBLA | PS3 | PSN/Home | PSP/Vita | PC/Steam | DSi/3DS | Wii | iOS | Android | Facebook

Now recruiting for Videogame Programmers, Database Programmers, Artists

jobs@**stainless**games.com

Firing on all cylinders

From rehabilitating injured veterans to building natural user interfaces that rival Kinect, **Aaron Lee** reports from Blitz Games Studios – the developer forging its own path into the next generation

STAYING STILL IS the fast track to extinction in the games business.

And you can't survive simply by 'tweaking' the tried and tested formula – just look at the names we've lost in this millennium age.

For Blitz Games Studios, a company founded over 20 years ago, the answer has been to diversify. From games consoles to PC, handhelds to handsets, Blitz develops for them all – and, according to its calculations, has so far sold enough titles to circumnavigate the Moon. As well as developing for a broad span of platforms, Blitz's games vary in size, they vary in genre and, in fact, some aren't even 'games' at all.

On *Develop*'s recent visit to Blitz HQ in Leamington Spa, we found a studio in transition, and one that's already taking a running jump into the next generation.

LISTEN AND LEARN

When people think 'next-gen', they can't help but think of burgeoning team sizes as more hands are needed to cope with increasingly complex development cycles. Taking on the number of platforms that it has such growth was inevitable, and Blitz's headcount now exceeds 220 people.

But with more than five projects on the go, each of them pitched at a different audience, there is a sense that every single member of its personnel is needed.

Its headline project, *Epic Mickey 2*, sequel to the Warren Spector-led Wii game about Disney's iconic mascot, is a major coup for the studio, which is tackling development duties for the 360 and PS3. But this is also a project of gargantuan proportions, with over 700 people worldwide contributing.

"You're just one small cog in a huge machine," acknowledges Blitz Games Studios' CEO Philip Oliver. "Whereas when you look at iPhone games, it can be completely original and creative."

The spectrum between the biggest games and the smallest games Blitz is creating is now wider than ever. It's got serious games, mobile games and even a potential board game in the works.

Richard Smithies, COO at Blitz, puts its multifaceted evolution down to a liberal studio culture, where staff are encouraged to operate autonomously.

"We believe it's wrong to suppress staff creativity," he says.

Studio design director John Nash is keen to add to his colleague's assertion.

> ***A product director at Blitz has immense freedom over the way that they manage, plan and grow their projects and their teams.***
>
> John Nash, Blitz

"A product director at Blitz has immense freedom over the way that they manage, plan and grow their projects and their teams, and we trust them to do so," says Nash. "We pride ourselves on listening to people, then we try to filter that information back to relevant members ▶

GAMES ON PRESCRIPTION

"THE AMOUNT OF money that companies spend on training dwarfs what they spend on entertainment," says CEO Philip Oliver, who sees serious games as the game-changer that the rest of the world has been "slow" to embrace.

Blitz's serious games division, TruSim, started in 2004. With *Vitilise*, Blitz's team hopes to boost encouragement and engagement among its target audience of wounded service men and women. Using Kinect for Windows, patients roam around a combat-free training field performing physical exercises intend to rehabilitate their motor functions.

Project director Polly Waddilove believes that the integrated home support network, accessed via the web, mobile or Facebook, will enable patients to evaluate their recovery and allow their therapists to prescribe custom games as part of their exercise programme. "It's about helping patients adhere to doing there exercise," says Waddilove.

PAINT ME A TALE

THERE ARE SOME 740 souls working on all versions of *Epic Mickey 2: The Power of Two*. Blitz is taking care of the 360 and PS3 ports, and is also responsible for designing all of the bosses featured in all versions of the game.

MOVE OVER, KINECT

MOOGIMOKO IS a demo for a sophisticated motion sensing camera that' still to be unveiled. Moogi, the monkey-like critter it stars, changes mood according to how players interact with it. When he is happy he maintains a bouncy demeanour but when he gets upset he turns 'Moko', changing his appearance and his emotional temperament.

Blitz's art director Aaron Allport is keen to flesh out the game, and sees lots of potential across the studio to grow its roster of original characters.

▶ of our team and our projects."

For an example of this freedom, look no further than the studio's first iOS game, *Kumo Lumo*. This delightful sidescrolling puzzle game was born out of six weeks of experimentation time that the studio's new iOS team (Team Lumo) had after finishing work on its previous project.

> ***"A computer will have enough power in the future to adapt itself to you. That's the way it should be."***
>
> Philip Oliver, Blitz

With *Kumo Lumo* in the polishing stages, this small team is already well under way with its next project, a card game with the visual flair of a Frank Millar pin-up and gameplay similar to *Top Trumps* or *Bang!*

KING OF USABILITY

All of Blitz's projects are undertaken by highly specialised groups.

The advantage for its designers, artists and coders having to adapt to the demands of different skill sets, explains Nash, is that they develop a "holistic knowledge about the mechanism of entertainment in all those different areas".

When it comes to the future of interactive entertainment and services, Blitz is betting heavily on both infrastructure and interface.

The studio has made 22 motion control games, seven of them for Kinect, and Oliver is resolute that they are the first step towards entirely controller-less interfaces.

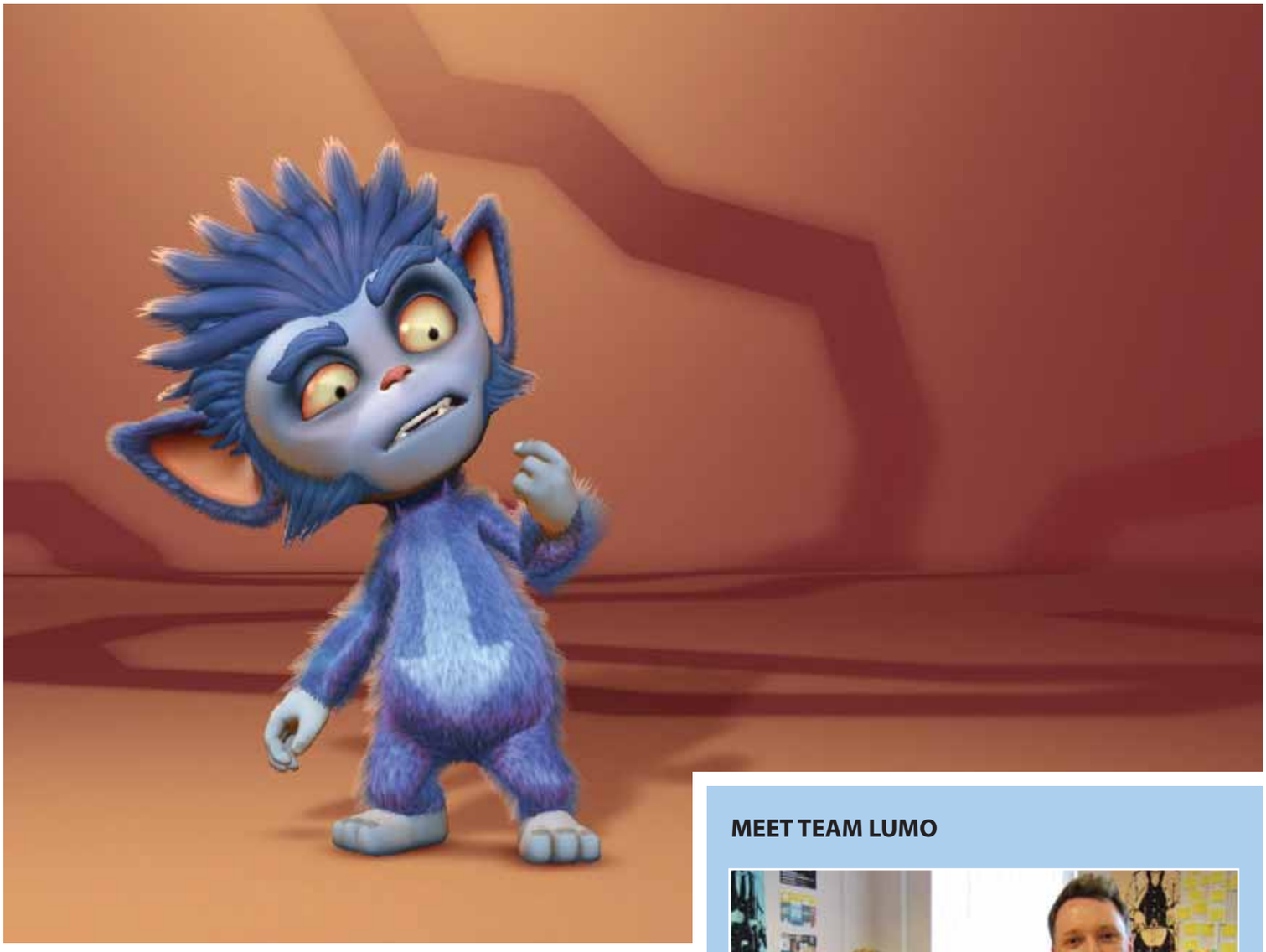
"If you think about the long-term, why are you trying to adapt the player to the computer, when a computer will have enough power and enough intelligence in the future to adapt itself to you? That's the way it should be," he says.

"Natural user interfaces are the progression of that, and a camera – or eyes and ears – have to surely be the future."

The next phase in Blitz's commitment to natural user interfaces is *Vitalize*, a development by its serious games division, TruSim, that's being created as a rehabilitation aid with the support of the US Department of Defense*.

Two of the biggest challenges physiotherapists face is motivating and monitoring patients who are recovering from the traumas of combat.

Blitz aims to make life easier for both parties through *Vitalize*, which monitors a patient's progress, offers feedback and



allows qualified staff to prescribe specific exercises for that patient. Forget stem cells, the future of physio is already here.

NO ORDINARY WEBCAM

As if pushing the boundaries in interactive healthcare wasn't enough, Blitz has yet another piece of potential star software on its hands in the form of a new character-led original IP.

MoogiMoko is a commercial demonstration for as-yet-unannounced motion sensing camera. The game features an monkey-like character that reacts in real-time to facial expressions and other motions from the player, displaying detailed emotional states that change as the interactions progress.

Though early in production, Blitz's vision that its new IP could become a showcase title for the new hardware demonstrates that the developer is putting many of its beliefs into working practice.

"One of our goals is to become a world leader in natural user interface," Nash adds. "The ultimate end goal is for you to interactive with digital entertainment in a very naturalistic manner.

"Many of us believe that characters are going to be the next interface. You're not going to see a cursor, you'll speak to the character and good things will happen. But there's an awful lot of technology and understand required to get us there."

BLITZ 2.0

Much has changed since the Oliver twins and friends founded Blitz in 1990. With each new console cycle game development has become more complex, more time-consuming – and more risky. In the digital era, the competition has become fiercer still, as everything from TV to social networks fight for consumer attention.

Blitz knows what's at stake and by diversifying its studio it has giving itself the broadest range of opportunities.

Of course, is Blitz in danger of becoming a jack of all trades?

"The expression may come to mind," Smithies agrees. "But if you look at each project, you'll see that for each of those we're actually a master of that."

So thanks to its breadth of projects and belief in its staff, Blitz appears to be ready for anything. Certainly, few studios will be feeling as confident as its does about its options in the next generation.

"Rather than just saying: 'Hey, games are going to be like this in the future', we want to make that happen, and the only way to make that happen is to crack on with it," says Nash, brightly. "And that's a big difference with the studio here compared to a lot of others that I've visited. We don't just talk about it, we think how we can actually make it happen." ■

MEET TEAM LUMO

KUMO LUMO, BLITZ'S first iOS game, is inspired by the sticker art movement. Bright colours and crisp lines permeate its 2D characters and backgrounds.

Players control a rain cloud in this action puzzler of creation and protection, and must save the world using the power of precipitation. Chillingo has already snapped up the title, which is due later this year.

The next iOS project for Team Lumo is *Pistoleros (above)*. The team went through approximately 20-to-30 iterations of this board game before settling on its current form. The team even built a physical version for playtesting.

"Building a board game helped us establish what the brand was" says project director Steve Stopps.

*Acknowledgement of support: This work is supported by the U.S. Army Medical Research and Materiel Command and the USAMRAA under Contract W81XWH-11-C-0066.
Disclaimer: Any opinions, findings and conclusions or recommendations are those of the authors and should not be construed as official Department of the Army position, policy or decision unless so designated by other documentation and do not necessarily reflect the views of USAMRAA

DO YOU KNOW DIGITAL?

PARTNERS GET:

- Mini Presentation Slot ✓
- Dedicated Networking Area ✓
- Delegate Speed Meetings ✓
- Integrated Editorial Plan ✓
- Free delegate allocation ✓

WIN APPLE TVs

Five to give away in a prize draw to those booking at Early Bird rate

Book now via www.londongamesconference.com

Early Bird delegate rate £199*

Digital Discovery and Distribution for Games:

What Works and What's Next

Wednesday November 21st 2012, 3.15pm - 11pm

One Wimpole Street, 1 Wimpole Street, London W1G 0AE

www.londongamesconference.com

Platinum Partner

Gold Partner

Media Partners

In association with

** Limited to first 100 tickets*

CONFIRMED SPEAKERS

Bruce Daisley
Twitter

Warren Mills
Google

Mark Turpin
Yogscast

Roger Walkden
EA Origin

Rich Keen
IGN

Simon Little
ISFE

Nicholas Lovell
Gamesbrief

John Clark
Sega

Matt Carroll
Disney

DO YOU KNOW DIGITAL?

DELEGATES GET:

- Discovery Case Studies ✔
- Conference & Networking ✔
- 'Speed Date' Meetings ✔
- Exclusive take-away data ✔
- Early bird from £199 ✔

3.15pm	4.00pm - 8.00pm	8.00pm - 11.00pm
Registration	Conference	Networking and buffet

lgc london games conference 2012

Partnership: To ensure your brand is part of the London Games Conference please contact Lesley Blumson on 01992 535647 or email: lesley.blumson@intentmedia.co.uk

Delegate Places (strictly limited):
Contact:Hannah Short on 01992 535647
or email: hannah.short@intentmedia.co.uk

The Largest Game Show in Latin America arrives at São Paulo - Brazil

October 11th to 14th

EXPO CENTER NORTE
CENTRO DE EXPOSIÇÕES E CONVENÇÕES

www.brasilgameshow.com.br
facebook.com/brasilgameshow

BGS
BRASIL GAME SHOW

SPONSORS

XBOX 360 · SONY · ACTIVISION · LEAGUE OF LEGENDS · ecogames · codemasters · BOA COMPRA A UOL COMPANY

PARTNERS

EDITORA EUROPA · BEAT98 · ARKADE games / tecnologia / cultura · finalboss · cdexpert · PS3W · X360 · TAM · 1001

BUILD

THE LATEST TOOLS NEWS, TECH UPDATES & TUTORIALS

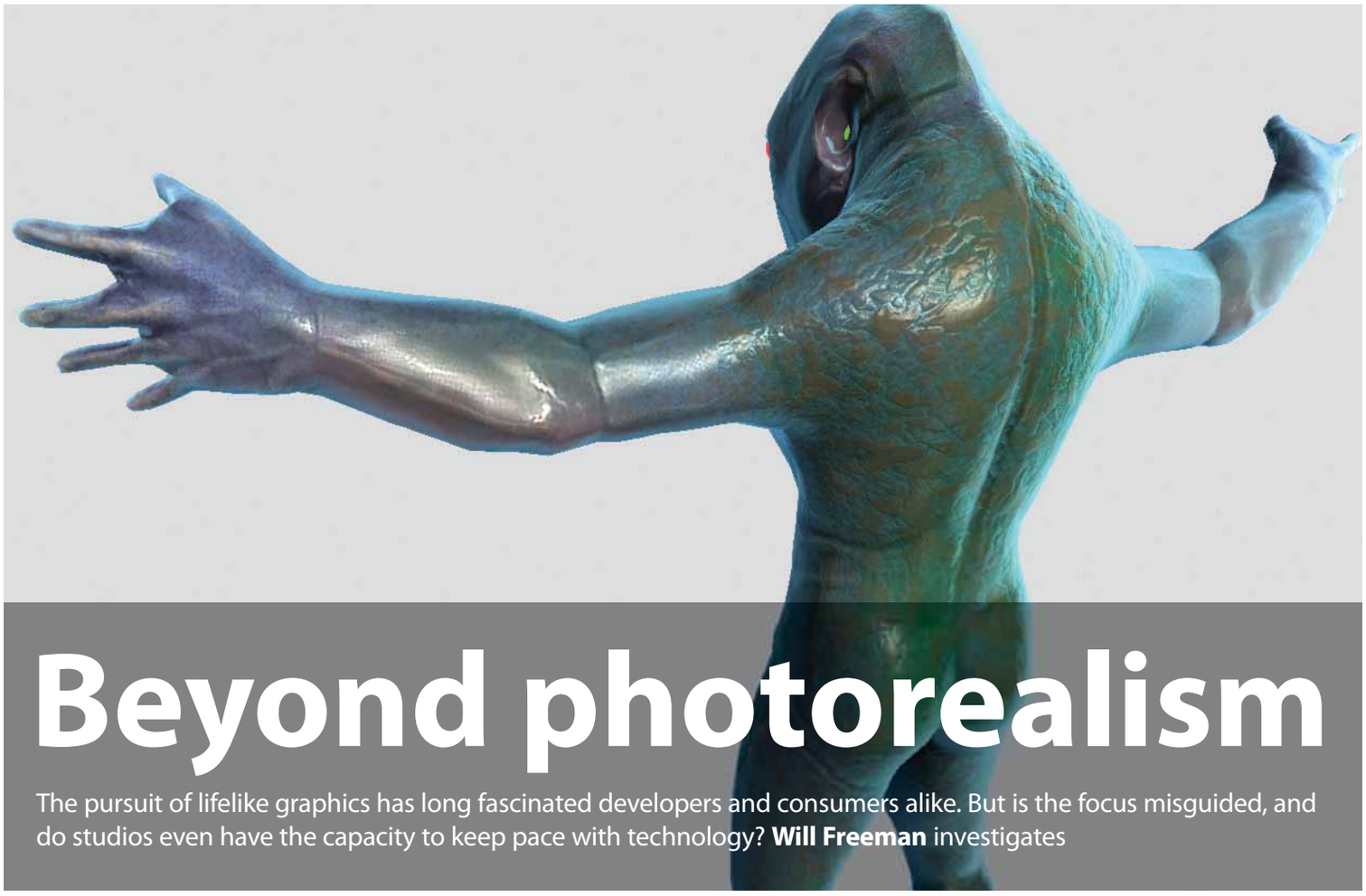
Sony's new loudness standards p49

Getting real

Just how far away is photorealism in games, and is an obsession with it good for the industry? The leading tool and tech companies clarify the future of lifelike games graphics, p38-40

RAD Game Tools' Oodle p45

Might and Delight's Unity title Pid p48



Beyond photorealism

The pursuit of lifelike graphics has long fascinated developers and consumers alike. But is the focus misguided, and do studios even have the capacity to keep pace with technology? **Will Freeman** investigates

Top-to-bottom: Richard Scott of Axis Animation, Chris Doran of Geometrics and Dag Frommhold of Havok. Main image: Texture tool Allegorithmic

IN THEIR MOST rudimentary form, video games are built from a remarkably short list of ingredients. They are made of light and sound, infused with interaction.

And while it is the latter constituent that distinguishes games from other media most explicitly, it is the first – game visuals – that tend to beguile consumers the most.

The all-encompassing realm of visuals in the field of games development is especially extensive. Character and facial animation, rendering, lighting, texturing, environment design, even weather effects; these are but some of the disciplines that collectively stimulate the game-playing public. They are also the specialties burdened with achieving photorealism, a long-pursued milestone that now seems closer that ever.

But today a new sentiment is emerging in the games graphics field. As mobile's rise continues, and gaming hardware starts to offer creative opportunities that may stretch even the most numerous triple-A teams, has the focus on realism been misguided? And would the entire industry benefit from exerting development energy elsewhere?

SKIN-DEEP

Certainly, from a purely creative context, there are experts across the industry that feel the importance of photorealism has been overstated, even if its arrival is assured.

Dr Gareth Edwards, director of facial animation outfit Cubic Motion, is one those graphics specialists.

"I'm not convinced that photorealism, which is coming, is a great paradigm-shift," explains Edwards. "Entertainment is about escaping to a different reality, and there are countless ways to achieve that. Whether it's a text adventure or a photo-real world, I'm not sure the medium is as important as people sometimes make out. What matters to me is this: Having chosen a medium for your new reality, executing as well as possible within that medium and maintaining the same level of quality for everything in the game."

> ***"We have to be careful in what we mean by photorealism. What people actually mean is 'it looks like film', not like real life."***
>
> Chris Doran, Geomerics

Some believe the focus of photorealism, however, is not just a creative distraction, but a premature concern for developers. Before we reach graphics that would pass a Turing test for the human eye, perhaps there is a need to focus on tools.

"We want the tool pipeline to get out of the way of the creative process – to handle things like reliable representation of animation data at run-time," says Paul Doyle, CEO of custom graphics application development solution Fabric Engine. "From that viewpoint, photorealism or stylisation does not matter. What matters is letting the artist create the characters they want more efficiently, without the degradation of quality caused by many game pipelines. That's where we think the collective effort needs to be."

Others, meanwhile, suggest that before too much more energy is expelled on reaching lifelike visual quality and movement, a concrete understanding of what photorealism is still needs to be defined.

"We have to be careful in what we mean by photorealism," puts forward Dr Chris Doran, COO and founder of lighting company Geomerics, best known for its Enlighten technology. "What people actually mean is 'it looks like a film'; not 'it looks like real life'.

"The two are actually quite different. What this means is that we should look to film post-processing and compositing tools and bring them to real-time. This is a big challenge as some of the volumetric effects used in films are massively compute intensive. But this is an area we are actively researching and we expect to see some big improvements for games graphics."

Doran also speculates that the industry has a long way to go yet. In the pages of previous issues of *Develop*, there may well have been game images that trick the eye for a second, but that is very different from a fully interactive moving world that can convince the human mind.

SEEING CLEARLY

Elsewhere, at engine and games development powerhouse Epic, there's even a sense that as we approach near-convincing photorealism, independently minded studios may subvert the very advances that offer them the chance to build utterly accurate game worlds.

Top-to-bottom: Sébastien Deguy of Allegorithmic, Paul Doyle of Fabric Engine and Peter Busch of Faceware. Left: Faceware in action

"My personal opinion is that as photorealism is virtually achievable we will see a more artistic approach taken to games presentation," says Mike Gamble, European territory manager at Epic Games.

"I think *Borderlands* or even *Gears* for that matter – where an artistic style taps into the increase in graphical power to present an interesting vision."

There remains a sense, however, that photorealism as an objective for games developers across the globe can serve an important purpose; one that Peter Busch, vice president of business development at facial animation and capture specialist Faceware is confident in.

"The move to photorealism drives up all artistic elements," proposes Busch. "For example, if the movement of the face looks photorealistic, then so must the skin, the hair and cloth. When all of these elements break into the realm of realism, then you know you are onto something special.

"In addition, the drive for photorealism pushes hardware and graphics, which in turns improves technology, tools and general production practices."

As a motivator and stimulant for progress, then, photorealism as an end goal may serve a very important purpose. And we may even be close. So close, in fact, that today games artists may themselves be in one of perhaps the most famous theoretical chasms: the Uncanny Valley.

"Photorealism is not here yet," asserts Dr Sébastien Deguy, founder and CEO of texturing tools outfit Allegorithmic. "We're all very much in the Uncanny Valley, so we all need to find smart ways to get out of it. To mimic nature you have to effectively mimic the randomisation and distortion of a surface. The best way to do this in CG is to incorporate noise into a texture, which is why noise functions are at the core of our toolset."

STRENGTH OF CHARACTER

The human eye is a remarkable tool, and even more astute at detecting falsity when looking at human beings, and representations of human beings. That considered, a core focus in the hunt for photorealism is unsurprisingly character animation. As motion capture hardware becomes more affordable, and tools' abilities to ape human behaviours improve, there has been much talk of a new era for character animation. To progress in that context, a renewed single-mindedness is needed, and Faceware's Busch knows where.

"One of the biggest challenges we see is in character rigging and what is supported in a run-time environment," he states. "This has been a challenge for many years and still is not been addressed in next-gen engines.

"In order to further increase quality and fidelity for highly detailed areas of deformation such as the face, it will be key for developers to focus on increases in specifications such as influences per vertex, and support for animated displacement, wrinkle, tension, or colour maps."

"We see the biggest opportunities for progress in animation quality and secondary dynamics – those things that lead to film-quality characters in real-time video games," adds Fabric Engine's Doyle, who points to the fact that many game artists today

COMING TO LIGHT

Geomerics' Enlighten technology illuminating a virtual realm

PHOTOREALISTIC GAME worlds are nothing without believable lighting; a fact Geomerics has long served to address.

"The industry agrees that real-time global illumination is where all the action is," explains the tech company's COO and founder Chris Doran. "Dynamic lighting adds massively to gameplay, and the authoring benefits are huge. I expect real-time global illumination to be high up publishers' feature checklists for high-end titles."

And Doran isn't alone in seeing the importance of lighting to photorealism.

"The biggest opportunity I think is in real-time lighting," says Umbra Software developer relations manager Thomas Puha.

"That's going to be a game-changer as there's a lot of opportunities in this field. Doing proper real-time lighting is very processor-intensive and the more power, the better lighting we have."

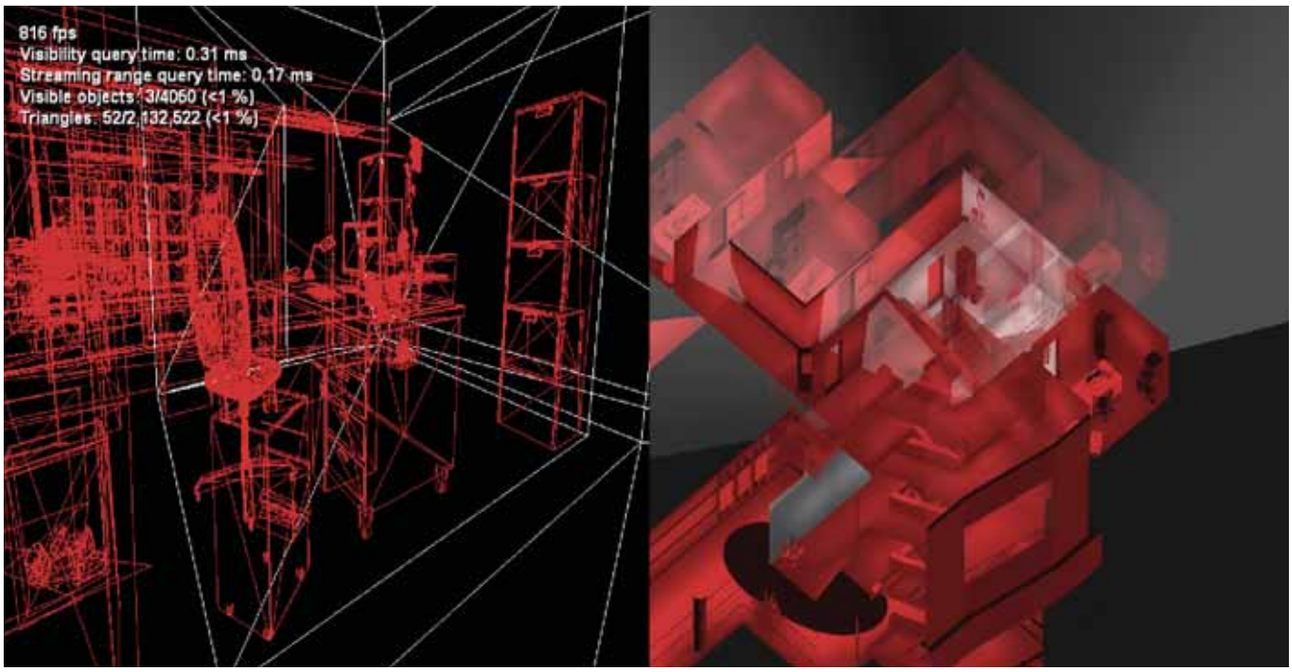
And tech giant Havok also insists lighting must be a key focus for the industry, as photorealistic rendering comes to the fore.

"This movement is definitely underway but there are still some big challenges ahead," says Dag Frommhold, Vision Engine lead at Havok.

"For instance, as worlds become fully dynamic and destructible that raises the bar with global illumination.

"There'll also be an evolution in the animation space, particularly facial animation."

Top-to-bottom: Gareth Edwards of Cubic Motion, Mike Gamble of Epic Games and Thomas Puha of Umbra Software. Right: Umbra's tech at work.



struggle for extended periods of time authoring things like hair and cloth.

"Artists can create those things in authoring tools, but most pipelines do not allow the artist to edit these systems at run-time, which forces artists to go back and forth to find a level of animation and secondary dynamics that will work in-game. As next-gen hardware comes through, the capability is going to be there for a big step-up in character animation, but it also means a big step up in asset complexity and pipeline."

In this environment, says Doyle, there will be even more need for high-performance custom tools to achieve quality characters.

GO WITH THE WORKFLOW

Doyle also highlights an important point. In a world where the power of the next generation of consoles and PCs offer a blank canvas onto which photorealistic games can be painted, there needs to be workflows in place that let human workers keep pace with what technology can achieve.

"We all know that graphics quality will continue to improve, but even with those gains you still get the business problems of long creation cycles and not enough man-hours, assuming they go unaddressed," says Deguy. "Right now, we are hearing a lot of companies asking: 'how the hell are we going to produce all of this content, without hiring a hundred more artists?'"

The burden of responsibility there, says Deguy, is with tools providers like his own.

Certainly, he is not alone in highlighting what teams can reasonably tackle as the industry stalks photorealism.

"I think it is very apparent that creating slick, detailed, engaging worlds in a photo-real or hyper-real style is not easy and not all development teams can pull it off," puts forward Richard Scott, executive producer of outsourcer Axis Animation. "This may be partly down to skills and knowledge, but the sheer number of art resources to make this happen might be the biggest factor. Not everyone can have large team sizes packed with top quality talent."

> ***"As next-gen hardware comes through, the capability is going to be there for a big step-up in character animation."***
>
> Paul Doyle, Fabric Engine

A CLEAR VISION

The solution to these problems, says Dag Frommhold, Vision Engine lead at middleware giant Havok, is a matter of engineering management with a view to bridge the range and power presented by tomorrow's platforms.

"Connected with this is the ability for game developers that are working across these platforms to still have a high degree of turnaround time regardless of device," states Frommhold. "Creating believable and conveying emotions is key."

"A lot of the focus tends to be on what's technically possible, but the biggest challenge we face is that the industry's ability to create content doesn't scale nearly as fast as platforms' capacity for the storage and display of content," adds Cubic Motion's Edwards in conclusion. "There are compelling opportunities for those who can find ways to scale the production of high-end content."

The final word, however, goes to Scott, who has spotted an encouraging trend that is a testament to advances in photorealism.

According to Scott, the worlds of film and television have spotted what the games-making sector has achieved and has turned to it for technology, which is a compliment considering that their need for photorealism may eclipse the games industry's.

"Seeing VFX companies use real-time technologies derived or directly taken from the games industry to create 300 visual effects per episode for a TV series just blows my mind," says an optimistic Scott.

Hollywood is watching. Best look busy. ■

GFX GO MOBILE

AS MOBILE DEVICES close in on console and PC in terms of raw power, a new opening is presenting itself for ambitious developers.

"The biggest opportunity for progress we see is for mobile game graphics to quickly match and even surpass console graphics," confirms Nizar Romdan, head of the Mali ecosystem at microprocessor and software outfit ARM. "However, there are different resource limitations that you do not have with a console game – power consumption is key. This affects the way you deal with memory transactions, compression technologies and task handling across the system."

The main focus, says Romdan, must now be on enabling high-resolution games while using the minimum amount of energy.

Games and tech company Epic, behind triple-A iOS series *Infinity Blade*, is also a keen proponent of graphics on mobile, and sees it as an opportunity no developer should ignore.

"As PC and console visuals become more and more lifelike – Uncanny Valley aside – the most obvious area of change becomes the mobile space," says Epic's European territory manager Mike Gamble.

"Given that the pace of evolution of devices is so rapid, we see a massive opportunity for developers to deliver deeper, more complex and more visually stunning titles."

And, according to Romdan, the options available to games developers looking to produce high-end graphics on mobile are poised to multiply.

"It will be soon be easy to use advanced effects in mobile games, like advanced lighting including global illumination and high dynamic range lighting (HDR), bloom, depth of field, lens flare, 3D textures, deformable environment as well as advanced physics," adds the ARM expert.

F2P summit

26 September 2012, London

Register Now! places cost just £295!

F2P Summit is Back!

After a successful first event in March, the F2P Summit returns to Rich Mix in Shoreditch, London on Wednesday 26 September 2012 for more learning and networking.

☆ Keynotes

Building the Kingdom – the story of how King.com created a leading cross-platform casual games company
Alex Dale, Chief Marketing Officer, King.com

Triple A on Console to Triple A on iOS
Jason Avent, Managing Director, Boss Alien

Other sessions include

- **The F2P Good and Bad**
  Sean Decker,Vice President, EA Play4Free
- **Seven Lessons from Making AION Free to Play**
  Carsten van Husen, CEO, Gameforge 4D
- **A Conversation with David Darling: Free is not enough!!**
  David Darling, Founder, Kwalee
- **Alternative Discovery Approaches**
  Ian Baverstock, Founder, Playfuel
- **The Basic Rules of F2P: 15 Simple Rules to Make Your F2P Game More Fun, More Popular and More Profitable**
  Nicholas Lovell, Founder, Gamesbrief
- **Secrets of the Global F2P Market Revealed**
  Pascal Zuta, CEO, Aeria Games Europe
- **The Egde Panel: A Critique of Free-to-Play**
  Chair: Alex Wiltshire, Editor, Edge Magazine
  Panellists: Jason Avent, MD, Boss Alien; Chris Donlan, Co-founder, Hockshot; Simon Parkin, Head of Games, Littleloud

Companies attending the last F2P Summit included:

Audiomotion Studios • Bad Management • Big Pixel Studios • Channel Four Television • Creative Assembly • Denki • Disney Online Studios • DR Studios • eelusion Game Studios • Eurocom Developments • fatfoogoo • Frognation • Frogster Online Gaming • Future Games of London • Gamersfirst • GREE • Heldhand Games • Hutch Games • InnoGames • Insight For Hire • Jagex Games Studios • Mforma Europe • Microsoft • N P D Group Worldwide • NaturalMotion • Natural Selection • nDreams • ngmoco • Papaya Mobile • Parker Consulting • Playfish • Rare • Sega Europe • Setgo Analytics • Sony Computer Entertainment • Splash Damage • Tapjoy • Tequila Mobile • Trojan Chicken • Unity Technologies • U-TRAX • Waterfront Entertainment • Yara UK

www.f2p-summit.com

Live, Camera, Action

IK and animation specialist IKinema has a new virtual production tool in development. **Will Freeman** talks to the company's CEO Alexandre Pechev about his hopes for the LiveAction, and its impact on the industry

Virtual production tools such as LiveAction (main image), have the potential to narrow the gap between post-production and performance capture, says Ikinema CEO Alexandre Pechev (above).

Before we go into the specific details, what is your LiveAction tool?
Motion capture is now an integral part of game and movie design, but the performance capture process hasn't changed much in recent years. We aim to help here.

In a virtual production setting, the director can see the performance of the actors with animations and environments as close as possible to the final product. LiveAction will allow that.

Closely integrated with Maya, environments, assets, lighting and cameras are exported from Maya and reconstructed in LiveAction's real-time rendering environment. Live motion capture data is then streamed into LiveAction and IKinema solvers are used to reconstruct and pass – or retarget – the animation from the captured marker data to the CG characters. This can potentially narrow the gap between post-production and performance capture.

> ***"With integrated interfaces to all major mo-cap systems, as well as low-cost solutions like Kinect, we aim to meet all needs."***
>
> Alexandre Pechev, IKinema

And how does the LiveAction approach differ from other virtual production tools?
At the moment most of the virtual production tools are either in-house built or based on Motion Builder's SDK. Examples for the latter are projects like *TinTin* and *Avatar*.

With LiveAction we are aiming to simplify this process. The artist is only required to construct a Maya scene, define lighting and cameras in this scene, and to set up IKinema's marker solving and retargeting engines via Maya's GUI.

With one key, all this is exported to LiveAction and reconstructed in a real-time rendering environment during the performance capture session for the specific take. LiveAction communicates with a live link to Maya to receive adjustments to solvers, lightings and assets.

Animation and recorded off-line motion capture data can be reused and replayed in LiveAction and synchronised with live performance capture sessions.

Furthermore, we aim to provide all this as source code so that studios can modify and adjust the environments to their needs, for example by replacing the shaders and the rendering layer but keeping the IKinema solvers and animation layers. We aim to produce a turn-key solution which is simpler

to use but sophisticated enough so that it can be modified and extended by clients, so as to reduce time and effort in the process.

Is the tool specifically for games development, or will it be useful to other disciplines?
The tool can be used for games development as well as movie projects.

What features, then, specifically make it a useful tool for developers?
Two aspects. Firstly, being open the tool will allow developers to use their own games engines in the process by replacing LiveAction's default engine. In this way they can use their assets to capture motion directly within their games and tune this performance capture to their needs.

Also, the tool will come with integrated interface to all major mo-cap systems, including some low-cost solutions like Kinect, to further simplify the process and reduce time and effort.

Why is virtual production important to games development?
Fundamentally, it can reduce time and cost. If the director and artists are given the opportunity to see the performance capture within their game environment, this will inevitably reduce effort and improve on the final end-product, minimising the need for re-takes.

Virtual production can be also used for pre-visualisation of ideas, as well as for quickly building storytelling examples using in-house or external motion capture facilities.

How do you see it changing the games development process in a wider context? Perhaps it will even change the games consumers play?
In my opinion, the focus in game design now has to be on animation. A lot has been done in recent years on physics, rendering, lighting and so on, but animations, without making an over statement, sort of lacked much attention. LiveAction, and in general IKinema itself, is committed to helping with this process.

How does your LiveAction tool relate to your IK work? Did the new tool in fact evolve from your IK tech?
Fundamentally LiveAction is centered around IKinema's solvers.

As IKinema is used extensively in post-production motion capture solving – in marker solving and retargeting – we thought that we could bring this quality during the performance capture session due to the speed and performance of our technology.

We can solve on dozens of characters in real-time, and therefore bring post-production quality during the performance capture stage, again reducing time and effort that developers undertake.

And does LiveAction include IK functionality at all?
Yes it does. In fact our solvers and the animation layer are the core of LiveAction. The remaining components are related to the rendering engine, and are a part that we intend to provide as open source.

What kind of studio size and model is this tool aimed at?
Another benefit of LiveAction is its affordability. We would like to see LiveAction helping small and large studios. With integrated interfaces to all major motion capture systems, as well as low-cost solutions like Kinect, we aim to capture all needs.

How does the pricing work?
We are still working on this, but we are aiming to make the product very affordable. If you license the binary version of the product, then together with the IKinema plugin for Maya, we see the whole platform to be around Motion Builder's cost per seat.

This will provide the current IKinema plug-in and all streaming interfaces, as well as the real-time IKinema solvers and the rendering environment. There will be also a pricing model for a source code license.

You've mentioned before about working with experts to 'shape LiveAction'. Are you open-minded to the tool evolving and changing?
Absolutely, the product is first open-source in one part, which immediately suggests collaboration. In addition, we have many ideas on how to extend the product in the future, from physics, particle simulations to adaptable solvers during the mo-cap session.

For example, cloth simulation can be used on top of the solvers and the motion capture animation, IKinema solvers can be used to adjust foot placement, background characters can be solved with IKinema with some behavior on top, for example look-at, interaction, and so on.

What other ambitions does your company have for LiveAction, virtual production and IKinema in general?
As a company we have big ideas. We are committed to delivering affordable solutions that can bring quality and reduce effort at any stage of the design process, both movie and game.

We are also just about to release the second version of our animation platform in the browser, WebAnimate.

This new version has been re-written from the ground up, and now includes a JavaScript based GUI and an OpenGL rendering engine – in fact shared with LiveAction – which makes it not only portable to many platforms, but also a much improved user experience with many new features.
www.ikinema.com

THE EASIEST WAY TO MAKE
user interface
SIZZLE
IS WITH Iggy
IGGY
Our powerful new system for cooking up UI using content created with Adobe Flash®
SUPPORTS ACTIONSCRIPT 3 and INCLUDES A HIGHLY OPTIMIZED GPU RENDERER
SO KICK IT UP A NOTCH WITH Iggy IT'S NOT JUST DELICIOUS... IT'S rad!
www.radgametools.com
sales3@radgametools.com
+1 425 893 4300
GAME TOOLS

GDC 12 ONLINE

GAME DEVELOPERS CONFERENCE® ONLINE

AUSTIN, TEXAS | OCTOBER 9–11, 2012 | EXPO DATES: OCTOBER 9–10

Join us at GDC Online, October 9-11, for three days of world-class online and connected games content led by top industry experts.

SESSIONS
TUESDAY–THURSDAY

- Business & Marketing
- Customer Experience
- Design
- Production
- Programming
- Monetization (sponsored)

SUMMITS
TUESDAY–THURSDAY

- Game Narrative Summit
- Game Dev Start-Up Summit
- Gamification Day
- Smartphone & Tablet Games Summit

EXPO FLOOR
TUESDAY–WEDNESDAY

Explore the latest connected game technologies and innovations, and connect with product experts.

FEATURING
TUESDAY–WEDNESDAY

game developers choice online awards

GDC Play

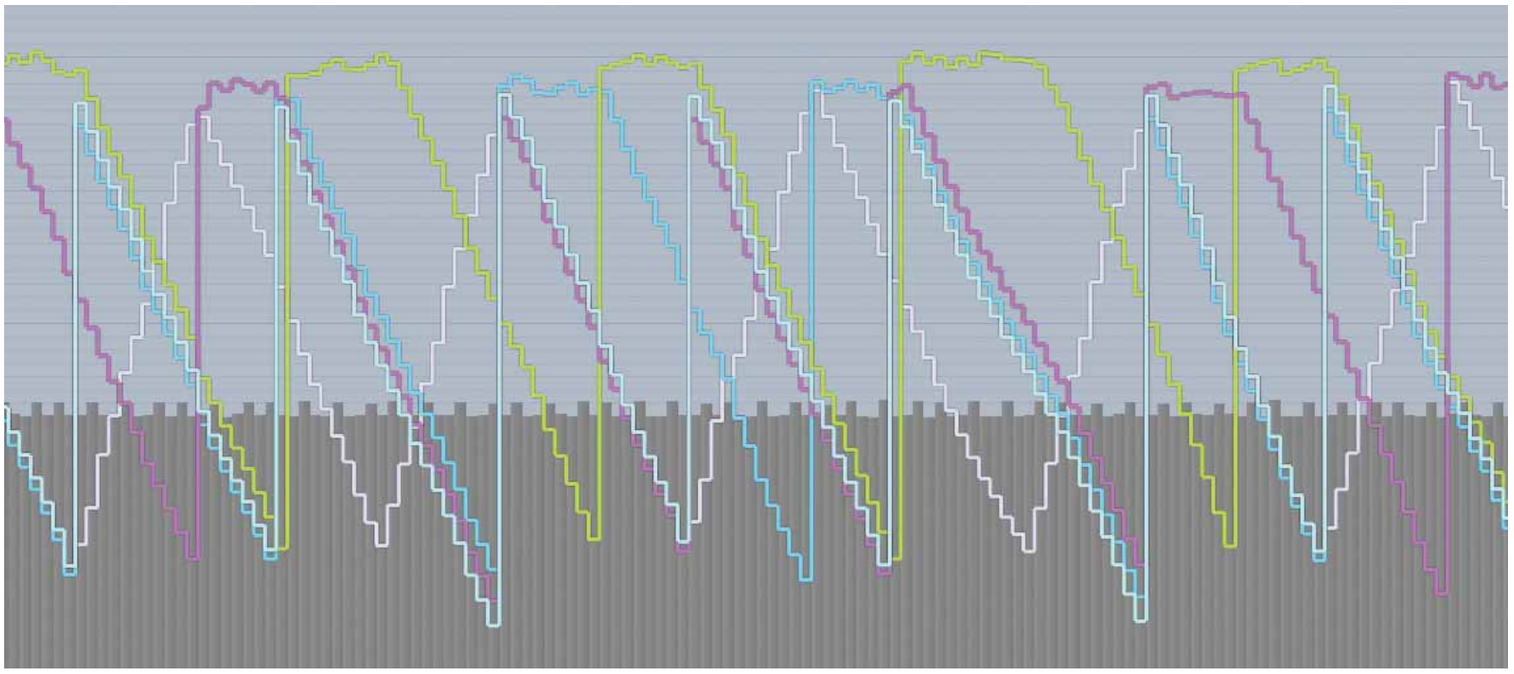
VISIT GDCONLINE.COM FOR MORE INFORMATION

UBM TechWeb

KEY RELEASE

Will Freeman eyes Rad Game Tools' Oodle data-compression technology

WHAT IS IT? An SDK that offers multi-platform asynchronous IO, data compression, and threading helpers
COMPANY: Rad Game Tools
www.radgametools.com



FEW WOULD POINT to games data loading as the most glamorous element of development, and yet in recent years its importance to studios of every size has increased manifold times.

Today, downloadable content and mobile gaming are core pillars of the industry. In that context, quick downloads and diminutive file sizes can prove vital to a game's success – or failure. Consumers no longer like to wait for games, and they rarely abide a single title clogging up a large chunk of their phone's storage space.

At the same time, console powerhouses and PCs continue to push abilities of GPUs, and RAM capacity increases at a greater rate than disk speeds and optical media sizes. Subsequently, developers need a way to squeeze bigger content into games without monsterous loading times.

That considered, long-serving middleware outfit Rad Game Tools is poised to release a new data-compression solution named Oodle, designed to allow developers to integrate true background loading and decompression, so as to make load times shorter, or even hide them completely. A highly specialised SDK, Oodle provides multi-platform asynchronous IO, data compression, and powerful threading helpers, and is due to make its way to studios this summer.

ON THE BINK

Oodle also integrates with the rest of Rad's popular tools suite, which includes the likes of Bink, Granny and Miles Sound System. For example, through the tech a developer can play a Bink video – the near ubiquitous video codec for games – at the same time as loading data, while Oodle schedules the data IO in the gaps of the video streaming.

Perhaps the most significant feature of Oodle, however, is the tool's threading tech, as the middleware's lead developer Charles Bloom explains.

"The Oodle threading system is the foundation on which the whole library is built," offers Bloom. "Clients will take advantage of it even if they don't use it directly, whenever they use Oodle's asynchronous loading and decompression.

"Oodle's threading provides a unified handle system for IO, tasks, SPU jobs, or any other type of async event; these can be used homogeneously in calls like WaitForMultipleObjects."

> ***"Oodle provides a lot of very carefully designed facilities that are useful for games in general such as a worker thread pool."***
> Charles Bloom, Rad Game Tools

Oodle also gives users a dependency system conceived to allow for the creation of asynchronous chains of operations from different functional groups.

"The chained operations are run immediately when the previous finishes so there's no need to poll for completion and start the next job, which could create unnecessary delays and thread switches," states Bloom.

"Developers are also free to use the threading system for tasks that are completely non-data-loading related; Oodle provides a lot of very carefully designed facilities that are useful for games in general such as a worker thread pool, a very small mutex, multithreaded allocators, and so on."

ONE FOR ALL

And despite its speciality and intricacy, Oodle is a tool constructed with numerous usage models in mind, with the team behind the tech considereding studios large and small.

"We've designed Oodle with a few different usage models in mind," says Bloom. "One that we foresee is the small studio or solo developer who simply doesn't have the time to write their own content paging and packaging systems. We suspect that these developers would just let Oodle take care of everything; the tool-side packaging, the data loading and decompression.

"On the other end of the spectrum, most large developers already have their own content management systems, so they wouldn't let Oodle take over. Rather they might want one or two specific features that we do very well, like maybe just our LZ data compressors."

A LOAD OFF THE MIND

Ultimately, Oodle's creation reflects a changing industry, where a larger consumer market means more studios are focusing on ease of access. With an ever-growing international audience now faced with more options than ever when selecting a game, a title that takes a few extra seconds to download – or a sluggish loading screen – might be the factor that makes a player move on to their next choice.

"In the past these are things that might have been ignored in the crunch to just get a game done, but more developers are making the non-gameplay moments a priority now," concludes Bloom.

Oodle serves to improve many of those non-gameplay areas, and based on Rad Game Tools' existing experience with middleware, it is likely to be around for many years to come.

The Oodle SDK in action (main image), and its lead developer Charles Bloom (above).

EPIC DIARIES

Mark Rein and **John Gaudiosi** explore Unreal Engine 3's role in enabling Kinect support for Fable: The Journey

Crafting a sense of scale and cohesion was key to the Fable: The journey dev team. UE3 helped them create just that.

LIONHEAD STUDIOS IS embracing Microsoft's Kinect for Xbox 360 with its latest game. *Fable: The Journey* is set a few years after *Fable 3* and unveils a brand new area of Albion to gamers.

Players take control of Gabriel, an outsider who becomes a hero as a result of the seer Theresa, who has been in the background of previous games in the series. The new title, which was developed using Unreal Engine 3, was designed from the ground up to fully embrace Kinect technology.

"Kinect gave us the chance to let the player feel more involved with the world," says Charlton Edwards, lead level designer at Lionhead. "It gave a physicality to some interactions that a button simply can't replicate."

According to Ben Brooks, Lionhead's senior scripter, the company's level design and gameplay scripting teams – 19 members in total – worked much more closely together on this game than previous *Fable* titles because the Unreal Engine's toolset united these disciplines in a way that the studio's old tech didn't.

"Our level design and gameplay scripting teams have used Unreal Kismet extensively – it's our primary tool for bringing the world to life," explains Brooks.

"It's allowed us to very rapidly prototype, and the visual interface has opened up quest creation to people who might view themselves as non-technical. The accessibility of the tools has really helped us be self-reliant as a team."

MATINEE'S PERFORMANCE

Brooks says that Unreal Matinee, in particular, was something of a revelation. On previous games, the camera placement was done by noting camera location and facing vectors and interpolating between them with script, which was a slow and clunky process. Being able to craft cut scenes in Matinee gave the team much more control and really empowered them to finesse their work.

Edwards added that a couple of the nine level design team members had Unreal Engine experience. For the rest it was a pretty gentle learning curve.

"The nature of the game means we didn't need to get right under the hood and bang our heads on the bonnet," he offers.

Edwards adds that the level design team used Matinee and Kismet to quickly block out puzzles and environmental animations so they could get their vision across and try out ideas without just showing someone something scrawled on a piece of paper.

"My main reason for choosing UE3 was tools and iteration," explains Marcus Lynn, technical director at Lionhead. "I wanted to get a smile back on the faces of content creators again where they wanted to go and improve something and feel like they had the support and tools they needed."

Lynn says his team started the evaluation with a skeletal team and quickly got up-to-speed on most aspects at a basic level. New engineers on the project were given a two-week period to write something fun using UE3, which proved successful.

MANY TOOLS MAKE LIGHT WORK

Lionhead also adopted additional Unreal Engine technology tools, such as Unreal Landscape and the foliage system, which helped reduce memory overhead and improve performance.

"We have managed to create a world that feels complete and cohesive," explains Edwards. "There is a real sense of scale and place with many magnificent vistas and always a sense of traversing a huge land."

The development process to bring Kinect functionality to life was a smooth one. The team ensured that they had Kinect initialised and updated at the correct points and that the interfaces were clear enough for the gameplay and level scripters to use in UE3.

"The Unreal Developer Network (UDN) has been an invaluable resource for us in both discussing common issues among developers and Epic, but also for getting quick answers and resolutions using the forum history and the combined knowledge of the other developers using it," said Lynn.

With the game nearing completion, the team is rightly happy with what they've been able to accomplish.

"It is a lovingly hand-crafted world, and we have tried hard to marry a lot of detail with the need to keep the frame rate high," remarks Edwards.

After three successful RPG adventures in the *Fable* series, Lionhead Studios hopes players will embrace the same type of innovation it pioneered in console games with Kinect technology.

Epic would like to thank Lionhead for speaking with freelancer John Gaudiosi for this feature.

UPCOMING EPIC ATTENDED EVENTS:

Escapist Expo
Durham, NC
September 14th to16th, 2012

Montreal International Game Summit
Montreal, Canada
November 13th to 14th, 2012

Please email: ***licensing@epicgames.com*** *for appointments.*

To discuss licensing opportunities for the Unreal Engine, please email: **mrein@epicgames.com.**

FOR RECRUITMENT OPPORTUNITIES PLEASE VISIT:
www.epicgames.com/careers

Canadian-born **Mark Rein** is co-founder and vice president of Epic Games, based in Cary, NC. Unreal Engine 3 has received four consecutive Develop Industry Excellence Awards. Unreal Engine 3 has also won eight *Game Developer* magazine Front Line Awards, including entry into the Hall of Fame. Epic is the developer of the bestselling *Unreal, Gears of War* and *Infinity Blade* series of games. Follow @MarkRein and @UnrealEngine on Twitter.

Discount code "Develop1314"

LAUNCH

Future Gaming & Digital Conference 2012

BIRMINGHAM SCIENCE PARK ASTON

LAUNCH a Career
LAUNCH a Business
LAUNCH a Product

13th and 14th November 2012, Birmingham Science Park, UK
Book your ticket NOW from £129 + VAT at: www.launchconference.co.uk

LAUNCH: Future Gaming & Digital Conference is the leading industry focused conference in the UK, featuring expert speakers and demonstrations from the games industry.

Rod Cousens, CEO, Codemasters
Will Luton, Creative Director, Mobile Pie
Ralph Fulton, Creative Director, Playground Games
Sion Lenton, Studio Manager, Sega
Trevor Williams, Chief Operating Officer, Playground Games
Anna Marsh, Co-founder & Design Director, Lady Shotgun
Keith Stuart, Games Correspondent, Guardian
Vicky Rowley, HR Manager, Activision Blizzard; FreeStyleGames
Steve Stopps, Project Director, Blitz Games Studios
Peter Lovell, Talent Acquisition Manager, Jagex Games Studio
Philip Dunne, Art Director, Starfire Studios
Ed Blincoe, CEO, DNA Dynamics
Dr Jo Twist, CEO, Ukie
Stuart Howarth, Co-Founder, KokoGames.com
Geoff Brown, Chairman, FairPlay Media
David Darling, CEO, Kwalee & Founder of Codemasters
Suresh Sudera, Head of Games, Vodafone Group
Chris Southall, Chief Technical Officer, SEGA
Stephen Hands, Managing Director, 3dnative
David Bozward, CEO, dojit games
Stephen Hood, Creative Director, Codemasters
Phil Tossell, Co-founder, Nyamyam
Fred Gill, Technical Director, EA Partners
Edward Relf, CCO & CMO, Mind Candy

info@launchconference.co.uk
+44(0) 121 260 6168
@launchconf

UNITY FOCUS

Might and Delight on Unity's role in its beautiful platformer Pid

PID
Developer: Might and Delight
What is it? A distinct retro-stylised platformer for digital platforms
www.pidgame.com

Wendy Young (above) and her colleagues called on their triple-A experience to make Pid (main images, top), a very distinct platforming game.

PID IS A GAME that, in a round-about way, came from *Bionic Commando: Rearmed*.

That's because a large chunk of the team behind *Pid* formed a tight–knit friendship while working on the Capcom reboot. That comradeship would quickly blossom into the formation of an independent Swedish studio named Might and Delight, which brought together staff members that have also previously worked on *Killzone, Mirror's Edge* and *Battlefield*.

Might and Delight's first game, however, is a very different creature from the triple-A behemoths the team have previously worked on. *Pid* is a striking 2D platformer with an unusual movement mechanic. It brims with atmosphere and charm, and it's been made with Unity.

THE PRICE IS RIGHT

Might and Delight's initial reasons for choosing Unity were clear-cut and simple. It all boiled down to cost, as managing director Wendy Young explains.

"We are a small developer with particular needs," says Young. "The bottom line is Unity was affordable. We didn't need a lot of extras. The editor tool was intuitive. We could reach all the platforms and get our game into the digital space."

It is exactly that kind of core appeal that has made Unity so popular with an army of indies and small-to-medium sized studios. But simplicity and affordability is not all the engine had to offer *Pid*.

While Young is quick to point to the Might and Delight team as deserving of the recognition for the platformer's unique look and feel, she also credits Unity as the element that opened the pipeline out so as to give *Pid's* artists greater freedom.

"Because of Unity's editor, we really had an opened pipeline, which also enhanced our craftsmanship, which we never expected," admits Young.

> ***"Because of Unity's editor, we really had an opened pipeline, which enhanced our craftsmanship."***
>
> Wendy Young, Might and Delight

"The programmers created the gameplay pieces as per usual, but the level designers were able to combine things in ways we never could have anticipated because it was just more intuitive to use the engine editor."

As a result, the team could enjoy a new freedom of experimentation with regard to gameplay components, which in turn allowed Might and Delight to handcraft the levels with more individualism.

"We think it just adds to the retro charm, and matches our project and company goals," offers Young.

A HELPING HAND

The Might and Delight staff of course faced challenges as they made *Pid*, but, in part due to their dealing with Unity the company as well as the tech itself, the game has emerged as something set to make quite an impact.

"Unity helped us by always being interested in their own product development and providing something that allows even the small developers the opportunity to realise their goals," states Young, on the matter of how Unity eased the outfit's development challenges. "Overall, licensing an engine puts the developer in a unique position, but we have been lucky that Unity is interested in its product and our communications have been fluid."

The final result is a game Might and Delight have every right to be very proud of. *Pid* combines stunning and unusual visuals, a distinct core mechanic and a thoroughly modern feel, despite its clear love of games from the past.

"Our needs were fairly basic," concludes Young. "We really didn't need to support a lot of high tech middleware, rendering and so on. For us Unity has been an ideal tool because of its affordability and ease of integration into our work pipeline.

"It just allowed everyone to work fluidly and independently, which means we can free up a lot of dependencies to focus solely on creating the game. That means a lot to us because we are such a small studio – every moment is just so critical."

HEARD ABOUT

John Broomhall listens in on Sony's new move to establish standards for loudness

Sony's loudness standards
Organisation: SCEE Creative Services Group
Platforms: PS3, PS Vita
www.worldwidestudios.net

Sony's new loudness standards, established by Garry Taylor (right) and his team at SCEE's Creative Services Group, may start with first-party IP like Uncharted, but could have a far wider imapct in the industry

TO ALL NON-AUDIO game devs, here's something you should know for future reference. Finally, someone has raised their head above the parapet, defining a set of working rules and standards to address a perennial pain-in-the-backside. Namely the annoying disparity in loudness between, not only different entertainment formats – for example DVD movie versus game – but even between game titles themselves, keeping our beloved, long-suffering consumers continually reaching for their remote controls.

During an engaging presentation at the recent 2012 Develop Conference, Garry Taylor, audio head honcho for Sony Computer Entertainment Europe's Creative Services Group announced a set of technical standards for loudness on PlayStation interactive entertainment platforms.

Why is this significant? Firstly, because it results from careful research by an internal Sony working group comprising representatives from Europe, as well as America and Japan. Secondly, it is widely supported within the PlayStation group, and finally, it is being adopted by all first-party studios whose audio teams are consequently being equipped with the relevant measuring/monitoring tools – as is QA.

TALKING SHOP

Such issues have been discussed on many occasions previously by sundry special interest groups, but these guidelines and recommendations move things well beyond another talking shop. This is serious – we're talking about iconic game franchises like *Uncharted, Killzone* and *LittleBigPlanet*.

> ***"The feedback so far has been extremely positive, with a number of big developers voicing support."***
>
> Garry Taylor, SCEE

Controlling the overall perceived loudness of audio programme content is not particularly easy or straightforward, even for linear media. Obtaining useful metrics for non-linear interactive play experiences is tougher still, given the unpredictable nature of video game audio replay driven by user input. There are associated reproducibility issues with one user's experience potentially differing markedly from another's, depending on their style of play, dictating the 'at run-time' inputs to the game audio engine. Plus, you'll always have those disruptive audio engineers who simply want to poke holes in such initiatives, showing how cleverly they can cheat them.

Nevertheless, you can essentially be assured that the general aim of these recommendations is not only strongly supported within internal PlayStation development, but so far, has been generally very well received by the wider game audio community, who are hungry for useful guidelines to adopt, and will accept and run with them in perfectly good faith.

"The International Telecommunications Union's ITU-R BS.1770-2 standard gives us the tools we need," says Taylor. "Within Sony, we have universal support, though there are still issues over reproducibility given the interactive non-linear nature of programme content. My advice is buy a loudness meter and get used to using it."

Regarding the reception to his announcement, he adds: "The feedback I've received so far has been extremely positive with a number of big developers voicing their support for the initiative.

In my opinion, this is something that should have been done a long time ago and I'm looking forward to working with developers, both internally and externally, to bring this to fruition.

THE NITTY GRITTY

PS3 target loudness: -23 LUFS +/- 2 LU
Vita target loudness: -18 LUFS +/- 2 LU

A Sony team trying to establish standards for loudness measured over 120 games, films, trailers and TV shows, in both stereo and 5.1 with titles measured over a period of between 10 and 30 minutes. Their findings were:

Average loudness level
32 films: -23.13 LUFS
24 TV shows -22.50 LUFS
52 Games: -17.78 LUFS

They discovered that, on average, games are 50 per cent louder than TV and film. The resulting guidelines drawn up also include the following recommendations:
- True Peak should not exceed -1 dBTP
- Loudness Range should not exceed 20 LU
- XMB Thumbnails (game previews in menus) should measure a maximum of -23 LUFS for PS3 & -18 LUFS for Vita
- PlayStation software products should be measured for a minimum of 30 minutes, with no maximum, and those parts of the game measured should be a representative cross-section of all the different parts of any title from cut scene to gameplay.`

"Bear in mind that the default PlayStation 3 down-mixing formula reduces the stereo volume by 3dB and, of course, certain types of games vary in loudness depending on play style," says Garry Taylor, audio lead for Sony Computer Entertainment Europe's Creative Services Group.

"We are currently looking at reproducibility issues, collecting data from first party QA, and may revise tolerances and measurement guidelines in the future."

To comply with the ASWG recommendations he advises developers that the easiest way is to put a compressor and/or limiter on the master buss whereby the compressor ratio and threshold gives control over the Loudness Range (LRA) and the compressor output/make-up gain gives control over loudness (LUFS).

John Broomhall is an independent audio director, consultant and content provider.
E: develop@johnbroomhall.co.uk
www.johnbroomhall.co.uk

SOURCEBOO

CREATIVE & PROMOTIONAL SERVICES

Lick Creative
Tel: 0208 498 4000
www.lickcreative.com

an.x
Tel: 01722 420820
www.anxagency.com

Atomhawk Design
Tel: 0191 490 9160
www.atomhawk.com

Bastion
Tel: +44 (0)20 7269 7900
www.bastion.co.uk

Buzz
Tel: +61 3 8412 9000
www.buzzproducts.com

Studio Diva
Tel: 0117 214 0404
www.studiodiva.co.uk

Fink Creative
Tel: 01480 302350
www.finkcreative.com

Fluid
Tel: +44 (0)121 212 0121
www.fluidesign.co.uk

Frontroom
Tel: +44 (0)20 7729 3033
www.frontroom.com

Gem Creative
Tel: 01279 822 800
www.gem.co.uk/gemcreative

Indigo Pearl
Tel: +44 (0)20 8964 4545
www.indigopearl.com

Jellymedia
Tel: 01253 885581
www.jellymedia.com

Mi5 Communications
Tel: +46.708.257.876
www.mi5communications.com

OM
Tel: +44 20 7713 9000
www.omuk.com

Peppermint P
Tel: 0207 240 2645
www.peppermintp.com

Premier
Tel: +44 (0)207 292 8330
www.premiercomms.com

RealtimeUK
Tel: +44 (0)1772 682363
www.realtimeuk.com

Side and Sidelines
Tel: +44 (0)207 631 4800
www.side.coM
www.sidelinesagency.com

SJS LONDON
Tel: +44 20 7421 9400
www.sjslondon.com

Splatter Group
Tel: 01902 544154
www.splattergroup.co.uk

studio CO2
Tel: +44 (0)1483 414 415
www.studioco2.com

The Audio Guys
Tel: +44 (0) 1934 710024
www.theaudioguys.co.uk

Über
Tel: +44 (0)114 278 7100
www.uberagency.com

Wave Recording Studios
Tel: 020 7439 8080
www.wavestudios.co.uk

DIGITAL DISTRIBUTION

Atomblock
Tel: +31[0]24 6452544
www.atomblock.com

GAMING ACCESSORIES

Lygo International
Tel: 0191 230 6650
www.lygoworld.com

Performance Designed Products
Tel: +44 (0)1753 272120
www.pdp.com

Thrustmaster
Tel: 01932 577546
www.thrustmaster.com

INTERNATIONAL DISTRIBUTION

Click Entertainment
Tel: +44 (0)203 137 3781
www.click-entertainment.com

Curveball Leisure
Tel: +44 (0)1792 652521
www.curveball-leisure.com

Digicom Solutions
Tel: +44 (0)845 6344 256
www.digicomsolutions.biz

GameWorld
Tel: +31(0)10-2983838
www.gameworld.nl

Ideal Software
Tel: 01767 689720
www.idealsoftware.net

Koch Media
Tel: +31 182 601228
www.kochmedia.com
www.deepsilver.com

Link Distribution (UK)
Tel: +44 (0)1274 684 668
www.linkdistribution-uk.com

QVS (QV Software)
Tel: +61 2 9748 2555
www.qvsoftware.com.au

Ster Kinekor Entertainment
Tel: +27 11 445 7700
www.primedia.co.za

Vogue Distribution
Tel: +44 (0)1480 409256
www.voguedistribution.com

LEGAL SERVICES

Charles Russell LLP
Tel: +44 (0)20 7203 5000
www.charlesrussell.co.uk

Harbottle & Lewis LLP
Tel: +44 (0)20 7667 5000
www.harbottle.com

LOCALISATION, QA AND TESTING

Babel
Tel: 01273 764100
www.babelmedia.com

GlobalStep LLC
Tel: +44 (0)207 203 2000
www.globalstep.com

Testronic Labs
Tel: +44 (0) 2070 421 700
www.testroniclabs.com

Triple A Testing
Tel: +34 952 028 080
www.tripleAtesting.com

Universally Speaking
Tel: +44 (0) 1480 210621
www.usspeaking.com

VMC Game Labs
Tel: +44 (0) 1753 849 700
www.vmcgamelabs.com

MANUFACTURING SERVICES

OK Media
Tel: +44 (0)20 7688 6789
www.okmedia.biz

Sony DADC Austria AG
Tel: +43 (0)6246 880-0
www.sonydadc.com

MONETISATION AND PAYMENT

Adcash
Tel: +372 687 3002
http://www.adcash.com/

To list your company here and online every week

K 2012

The essential guide to interactive entertainment agencies and service companies

arvato Entertainment Europe Sonopress GmbH
Tel: +49 (0) 5241 80 5690
www.fidelispay.net
www.arvato-entertainment.de

InComm Europe
Tel: 01489 556700
www.incomm-europe.com

RECRUITMENT
Aardvark Swift
Tel: 01709 834777
www.aswift.com

Amiqus
Tel: 01925 839700
www.amiqus.com

Avatar Games Recruitment
Tel: +44 (0) 1695 682 118 (UK)
1-855-AVATAR-2 (US)
www.avatar-games.co.uk

MPG Universal
Tel: 0844 800 9995
www.mpg-universal.com

OPM Response
Tel: +44 (0)1206 214421
www.opmjobs.com

Specialmove Consultancy
Tel: +44 (0)141 530 4555
www.specialmove.com

Wayforward Recruitment
Tel: London 020 7734 4664
Bristol 0117 966 6038
www.way-forward.com

REGIONAL ASSOCIATIONS
gamecity:Hamburg
Tel: +49 40 22 70 19 - 41
www.gamecity-hamburg.com

SOFTWARE DEVELOPMENT
Artery Studios
Tel: (+36) 20 5868 006
www.artery-studios.com

UK DISTRIBUTION AND LOGISTICS
Centresoft
Tel: 0121 625 3399
www.centresoft.co.uk

Koch Media
Tel: 01256 385 200
www.kochmedia.co.uk
www.kochmedia.com

Realtime Distribution
Tel: 01480 435881
www.realtimeonline.co.uk

WEB SERVICES, CLOUD AND INFRASTRUCTURE
LeaseWeb
Tel:+31 20 316 2880
www.leaseweb.com

STUDIO DIVA

Tel: 0117 214 0404
Email: workwithus@studiodiva.co.uk
Website: www.studiodiva.co.uk

Studio Diva is an independent retail communications agency, with nearly 10 years of experience producing standout campaigns for some of the world's most iconic video games brands.

Find out more about this company and many more

ONLINE NOW

www.intentmedia.co.uk/sourcebook/

please contact Jennie.Lane@intentmedia.co.uk

SCALE GLOBALLY INSTANTLY.

An excellent and memorable online gaming experience requires a lightning-fast round trip back to the gaming server. This is impossible with traditional web hosts, and building your own global network is beyond the scope of all but the largest companies.

EdgeCast can give you the truly global presence you need, while helping you meet the demand of millions of users without skipping a beat.

edgecast.com/gaming

DIRECTORY

The world's premier listing of games development studios, tools, outsourcing specialists, services and courses...

SERVICES SPOTLIGHT:
Audio outfit Air-Edel
p58

TOOLS SPOTLIGHT:
Fabric's graphics platform
p60

TRAINING SPOTLIGHT:
University of Portsmouth
p62

KEY CONTACTS

Aardvark Swift	01709 876 877
Amiqus	01925 839700
Artery Studios	www.artery-studios.com
BigWorld	+15122890145
Blitz Game Studios	01926 880000
Codeplay	0131 466 0503
Epic	+1-919-870-1516
inComm	+44 (0) 1489 556700
MPG	www.mpg-universal.com
Testronic Laboratories	+44 (0) 2070 421 700
University of Hull	+44(0) 1482 465951

develop DIRECTORY

GREAT ADVERTISING OPPORTUNITIES

RATES

1/4 page: £450 (or £200/month if booked for a minimum of six months)

Contact:
Alex.Boucher@intentmedia.co.uk

T: 01992 535 647

RECRUITER HOT SEAT

This month: Media Molecule's **Sara Bravey** explains how to get the studio excited about your games development skills

What are the benefits of working at a place such as Media Molecule?
Media Molecule is still a relatively small studio and it's packed to the brim with very talented individuals.

So one of the best things about working here is that you are constantly surrounded by forward-thinking people with new, fresh and exciting ideas and a huge passion for what they do.

As a studio we encourage every member of the team to contribute to the projects that we work on and to share their ideas, creativity, knowledge and experience.

How many staff are you currently looking to take on?
We have a number of vacancies, but we are always on the lookout for talented, passionate people. Even if there are no openings that match your skills, if you're brilliant we'll always have a place for you on our team.

What professions are you currently looking to recruit from?
In general, we are looking for people who have experience within the games industry. But in the past we have recruited from a broad range of professions, from the construction industry to banking professionals.

Our current priorities are an experienced gameplay programmer, so by definition this person would need to come from within the games industry. Another current priority though is a 3D animator and for this role we are happy to look at candidates with a broader range of backgrounds such as the film and television industries.

Who is the best interviewee you have ever had and how did they impress you?
We have had so many great interviewees it's difficult to pick one out. Most of them, needless to say, are part of our team today, and in one way or another managed to convey their passion, excitement and dedication to the role they were interviewing for.

One interviewee who stands out as particularly memorable is a member of our team who came from the *LBP* community and had no previous experience working in the industry. Not knowing what to expect from his interview but wanting to be prepared he turned up with a PS3 under his arm so that he could show us the levels he had made. To cut a long story short, the whole studio ended up in the interview room looking at his work and the interview ended with a standing ovation.

And who was the worst?
Interviews can be quite stressful and it's natural to be nervous. One of the best ways to overcome this is to have done your homework before you arrive. The worst interviews I've had have been with candidates who have obviously not prepared at all and know nothing about our company or our industry.

GET THAT JOB

Development specialists offer advice on how you can score that promotion

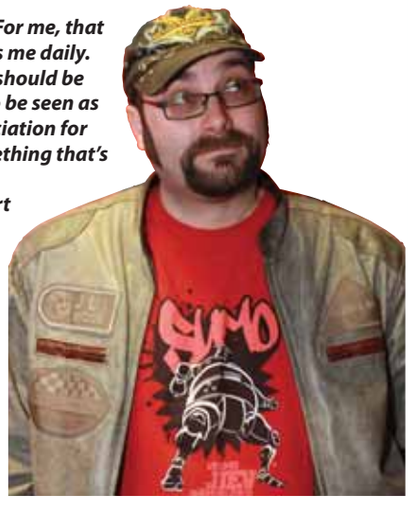
THIS MONTH: PRODUCER

"I came to the producer role from QA. For me, that experience was invaluable. It still helps me daily.

"You need to be approachable, you should be able to garner respect and you need to be seen as fair. Simple things like showing appreciation for people who work late or praising something that's worked out goes a long way.

"Finally, be prepared to be the expert on the project. You'll wind up wearing many hats and will be asked about design, code, art issues and more. Having a background in any of those fields helps, but using common sense to work out what's good for the project, yet achievable with your team and budget, is what you'll be expected to do."

Steve Lycett,
Executive Producer, Sumo Digital



SIX-SECOND STUDIO SPOTLIGHT

BonusXP

- BonusXP was founded in summer 2012 by former Ensemble staff Dave Pottinger, John Evanson and Jason Sallenbach
- It's team of five prefer working in a tightknit group, having previously worked on *Halo Wars*, *CastleVille* and *Rage*
- BonusXP is developing mobile games on iOS initially, but will add additional platforms as it expands
- The studio's goal is to craft 'highly polished' games that are easy to play, but that have a deep layer of strategic depth, says CEO Dave Pottinger
- It hopes to welcome four or fiveadditional people on board, including senior developers, coders, artists and more

www.bonusxp.com

BIO
Name: Sara Bravey
Title: HR Personnel
www.mediamolecule.com

> ***"Be prepared to talk in depth about your skills and experience, the way that you work, and what drives you and excites you."***
>
> Sara Bravey, Media Molecule

What advice do you have for a successful interview?
Be prepared, research the company. If it is an interview in the games industry, play some of the games they have released – talking about this is a great way to break the ice. If you have a portfolio of work (and by the way, everyone should have a portfolio, regardless of profession) bring it with you. Be prepared to talk in depth about your skills and experience, the way that you work, what drives you and excites you about your work, the challenges you have faced and how you have overcome them.

Think all of these questions and your answers through before you attend the interview. Have a list of questions ready to ask, an interview is a two-way process.

When starting a new job, what can developers do to impress and stand out from the competition?
I think being proactive is the key, you will have been employed for your skills and experience, so look for ways to share your ideas, skills and suggestions.

Try to get to know your teammates and get involved as soon as possible. Have a positive 'can do' attitude, show enthusiasm and flexibility and be prepared to go that extra mile.

How has the increased accessibility of engines in the mobile sector affected the quality of applicants?
I don't think it can ever be a bad thing to have more options. Greater accessibility is allowing more people than ever to try out more areas of programming and design. Our own experience here at Media Molecule has shown us that 'stars' can spring from the most unlikely places.

There's been a lot of discussion about games education lately. Do you think games development education in the UK is currently good enough?
In short – no. I think that whilst there are a growing number of universities offering options for games development courses, the number of options offered to secondary school children is very limited.

At this age children are like sponges, they soak up information so quickly, it's the ideal time to introduce them to skills and knowledge that they will inevitably find useful in later life.

My hope is that with the introduction of products such as Raspberry Pi bringing affordable computer technology to the education system, there is a huge potential to introduce a whole range of skills to children at an early age.

Offering secondary school-aged children the opportunity to experiment with programming for example would be a great step forward, not only in terms of improving the education system for games development purposes, but also for preparing them for a future where technology is prevalent.

NEW STUDIO ALERT!

ROVIO, THE FINNISH developer behind the monster mobile hit *Angry Birds*, has opened a new studio in Stockholm.

The studio is led by Oskar Burman, a familiar face in the Swedish games industry and former general manager of EA Easy Studios.

"Stockholm, often ranked as one of the world's most innovative cities, hosts an impressive talent pool, and Rovio, with its appetite for continued product growth, has a lot to gain from tapping into those creatives," says Burman.

"Rovio impressed me right from the start with their ability to think and execute in a big way. While other games publishers are satisfied with building a great game, Rovio builds a 360-degree entertainment experience, where the great game is just the start."

Since the success of *Angry Birds*, Rovio has indeed transformed itself into an entertainment media company, moving into merchandise and movies.

Rovio chose Stockholm because of its "vibrant" start-up scene and proximity to its headquarters in Finland. The studio is looking for 25-to-30 eager developers to join its flock.

The Stockholm branch joins other existing offices in Tampere and Shanghai, and will focus on supporting its main Finnish HQ on both current and upcoming game projects.

Burman added: "I'm super excited to set up Rovio's first games studio outside Finland, and create awesome entertainment to delight the world!"
www.rovio.com/careers

MOVERS AND SHAKERS

This month: Eutechnyx, The Blast Furnace, Caperfly and Sumo Digital

EUTECHNYX

Gateshead-based Eutechnyx has hired online game executive producer **CHRISTOPH VIETZKE** to serve as the studio's new development team lead.

He was previously head of *RuneScape* at MMO outfit Jagex where he worked for seven years. Vietzke brings experience in quality assurance, testing, localisation, production, community management and customer support to Eutechnyx.

"The team has worked extremely hard for five years to realise the dream of a racing game and car community delivering unrivalled quality in the free-to-play space," said Eutechnyx CEO Brian Jobling.

"The addition of Christoph gives the team additional momentum as we begin the rollout for the next evolution of *Auto Club Revolution*. His track record working on titles like *RuneScape* will be invaluable for our growth as we add more social and community features."

Eutechnyx's online social racing game *Auto Club Revolution*, which is being created in collaboration with the motor industry.

"The world of casual, social and online games has changed hugely since my first role in the sectors," said Vietzke.

"Compelling new concepts like *Auto Club Revolution* don't come along very often and I believe that this blend of goose bump-inducing racing combined with a rich social experience is eventually how all games will be. I'm thrilled to be on the team and to be part of the future success."

Vietzke studied in his home country of Germany and in the UK. He moved permanently to the UK and joined Jagex in October 2005.

THE BLAST FURNACE

The former head of Rockstar Leeds has joined Activision's new mobile studio as its chief creative officer.

The new developer, named The Blast Furnace, will be led by **GORDON HALL** alongside the ex-head of Rockstar London, Mark Washbrook.

The two of them will focus on developing "triple-A interactive experiences" for the mobile space.

Activision Leeds' first game is a remake of the genre-defining platformer *Pitfall!*, which was released last month.

Hall credits this as the game that inspired him and other team members at his new studio to seek a career in game development.

Hall's career in games began when he founded Mobius in 1996. Seven years later he sold the company to Rockstar, which renamed it Rockstar Leeds. The studio developed *Midnight Club* and *Grand Theft Auto* titles for PSP, Nintendo DS and iOS.

In 2009, he moved to Rockstar San Diego to help the team complete *Red Dead Redemption* before moving back to West Yorkshire.

Washbrook was the studio head of Rockstar London from 2005 to 2011.

CAPERFLY

Former Sega West president **MIKE HAYES** has joined digital entertainment and media app start-up Caperfly as its non-executive director.

Hayes joins the Leamington Spa-based studio, which is creating a mobile and smart TV business from the ground up.

"This is a good time to be in this new vibrant sector of the industry," he said.

"I am positive we can take advantage of the next great wave of innovation and distribution here at Caperfly. I see Caperfly as a unique mix of talented individuals with aspirations to develop high-quality titles, and I relish the opportunity to be a part of their success."

Caperfly CEO Gavin Cheshire added: "Mike joins Caperfly at a very exciting period of the business, as we accelerate through our plans, and then onto the launch of our first app."

Hayes now brings the studio's headcount to 11.

Hayes joined Sega in February 2004 as managing director. In 2005, he became president and CEO of Sega Europe and Sega America – collectively known as Sega West.

Hayes is credited for overseeing Sega's transition from a company focused on boxed-products to one geared for emerging digital markets.

SUMO DIGITAL

Sheffield-based developer Sumo Digital has hired **CRAIG ALBECK** as it's new digital development manager. Albeck will use his industry contacts and knowledge of alternative content and payment methods to aid Sumo as new business models emerge.

"I was overcome with euphoria. The level of production experience, passion and attention to detail with everything here at Sumo is unrivalled," said Albeck.

Carl Cavers, COO and co-founder of Sumo Digital, added: "We are excited to have Craig join the Sumo Digital family. His unrelenting energy and knowledge in the digital marketplace is going to prove an asset, as we look to build on our heritage of being a trusted development partner."

Albeck grew up in Yorkshire, where he contributed to "putting the local games development community on the global map" as part of industry network Game Republic.

Service & Tech Recruiter Hot Seat

We speak to Testronic Labs' global HR manager **Pam Mann** about avenues into localisation and QA

What makes Testronic different from other QA companies?
Testronic provides global QA solutions not only for games, but also for a variety of other industries such as film, TV, software and digital TV.

Our ethos is to have a passion for continued growth whilst ensuring that quality remains at the forefront of all work undertaken. This has enabled Testronic to build and maintain good working relationships with our clients. If there is a problem, we always get feedback and act on it. Having a good rapport with our clients allows us to better understand their needs and provide the flexibility they require.

Why should jobseekers choose a career in QA?
When considering a career in QA, a distinction between playing games and actually testing them must be recognised. Most of our technicians join Testronic with little experience of games testing. However, they do have a passion or an interest in games. A strong eye for detail is needed as that is what enables us to build a better product for our clients, and in turn their consumers.

You do have to be resilient as QA can be a pressured environment especially when trying to meet tight deadlines. In the end, that's when the team can get a real sense of satisfaction, especially when the final product is reviewed.

What disciplines are you in need of?
There is always a need for junior localisation and functionality testers. In the UK there are now opportunities for coordinators in localisation testing.

Have the skills needed to work in QA changed in the last five years?
Games testing is becoming increasingly complex and so a deep understanding of the structuring and functioning of games is needed. Regarding coding abilities, it is nice to have rather than a prerequisite skill.

In the UK, QA testing does require fluency in English and another language, most commonly French, Italian, German or Spanish. The language requirements have certainly changed over the last five years where now there is an increasing need to test in languages such as Arabic, Turkish, Chinese and Korean.

What advice can you give for a successful interview?
Prepare the questions you would like to ask the interviewers about the role, and research the company's website to see what interests you share.

If after the interview you find that you are not successful, use this as a learning experience. It is worthwhile finding out why you didn't get the job as it gives you an opportunity to improve for your next interview.

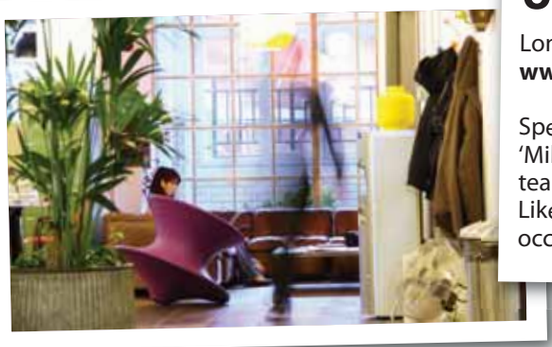
Don't be too hard on yourself.
www.testroniclabs.com/careers

Mind Candy

London, UK
www.mindcandy.com

Mismatched wallpaper in one corner, antique furniture in another and fake foliage creeping along pipes overhead. Mind Candy's interior décor echoes the influence of *Take Hart*, *Dazed & Confused* and the styling of 80s gaffs.

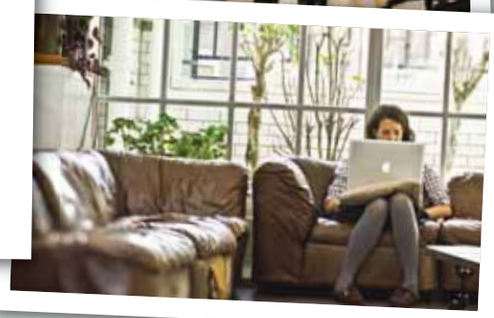
THIS IS **WHERE WE WORK**



Ustwo

London, UK
www.ustwo.co.uk

Spearheaded by its infamously eccentric lead 'Mills', UsTwo's interior is as colourful as the team that make games like Whale Trail there. Like neighbours Mind Candy (above), it occupies the Tea Building in hip East London.



SERVICES SPOTLIGHT

This month: **Air-Edel**

Air-Edel
18 Rodmarton Street
London
W1U 8BJ
United Kingdom

T: +44 0207 486 6466
E: air-edel@air-edel.co.uk
W: www.air-edel.co.uk

AIR-EDEL WAS established by Sir George Martin and Herman Edel over 40 years ago to write and deliver music to brief, and it has led a prolific history to date.

The company and it's composers have won numerous awards, including Oscars, Grammys, Emmys, BAFTAs and Ivor Novellos for their work on feature films. Film credits for its composers and music supervisors include *Atonement*, *Carlitto's Way*, *Harry Potter and the Goblet of Fire*, *V for Vendetta*, *The King's Speech* and Pixar's new release, *Brave*.

Over the last four years, Air-Edel has begun providing its award-winning audio services to the games industry.

"Music helps heighten the relationship between the player and the game," says Trevor Best, manager of commercials and new media, Air-Edel.

"Used correctly, music is a very powerful tool. We've created it in many films and we'd like gamers to share in that heightened experience."

Garnering a Develop Award nomination for Audio Outsourcing in 2011 is a sign that the studio has been living up to its reputation and has turned heads in the industry.

Air-Edel offers a wide selection of services, including music composition, production, licensing, sound design, recording and mixing, voiceovers and a sound library.

> ***"Through our work in film, we understand the ways of communicating and working together to achieve complete and flawless audio delivery."***
>
> Trevor Best, Air-Edel

Recording work often takes place at Air-Edel's Central London studio, whilst its composers are also set up to work from private facilities when needed.

A fantastic collection of vintage microphones and equipment are used by the studio, along with more modern kit such as Pro Tools HD. The main recording studio is ready to receive up

Aardvark Swift **01709 876 877** **www.aswift.com**

You can't
BEAT
our A.I.
That's our
AARDVARK INTELLIGENCE
Since 1989, Aardvark Swift have dedicated our every effort to the Video Games industry. Evolving with each and every generation of consoles, mobiles and gaming genres to become a market leading specialist recruitment consultancy for the Video Game and Mobile Entertainment market across the UK, Europe and the world.
WELCOME to our UNIVERSE
aswift.com
Follow Aardvark Swift Recruitment on Facebook or you can call us on 01709 876 877

Amiqus **01925 839700** **www.amiqus.com**

Discover a
global network
of talent today...
Amiqus provide specialist recruitment solutions for the Console, Mobile and Social Games Industries across 13 countries.
Call 01925 839 700 or visit amiqus.com
amiqus
recruitment specialists
for the games industry

Air-Edel's London sound studio (above), and the outfit's manager of commericals and new media Trevor Best (right).

to 25 musicians at once, while its remaining studios are ideal for overdubs and voice work.

"However, the most important part are our composers and their talent and facilitating the best communication possible between them, the development team and publisher," says Best.

He adds that Air-Edel's history in film has given it experience in writing to moving images, helping it understand that gaming requires an interactive compositional approach as oppose to a linear one.

The audio specialist's past notches in the game scene include composer management on *F1 2011* and *Killzone 2*, production and supervision on *LittleBigPlanet* and *Zubo* and licensing one of its composers' tracks to *SingStar*. Most recently, David Poore composed a piece for *LittleBigPlanet PS Vita*, while Chris Green has composed the music and soundscape for *Need for Speed: Most Wanted*.

Air-Edel has gained a competent knowledge of audio through the film industry, and plans to continue growing its position in the sector.

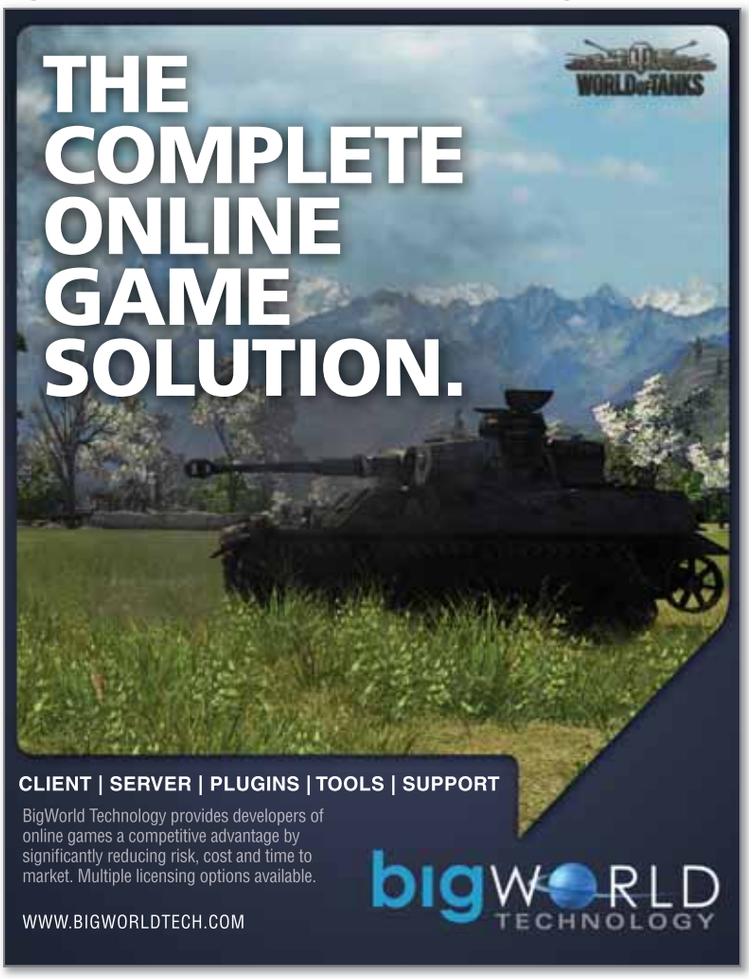
"With a group of award-winning composers who have trained in the skill of composing to picture, Air-Edel can offer a first-class composition and efficient delivery for any title that we are involved in," says Best.

"Through our work in film and other visual media we have a good knowledge of working with sound designers and understand how to achieve flawless audio delivery.

"We are excited and really looking forward to the future in gaming and playing a big part in it."

Artery Studios **www.artery-studios.com**

BigWorld **+15122890145** **www.bigworldtech.com**


THE COMPLETE ONLINE GAME SOLUTION.
WORLD of TANKS
CLIENT | SERVER | PLUGINS | TOOLS | SUPPORT
BigWorld Technology provides developers of online games a competitive advantage by significantly reducing risk, cost and time to market. Multiple licensing options available.
WWW.BIGWORLDTECH.COM
bigWORLD TECHNOLOGY

TOOLS SPOTLIGHT

This month: **Fabric Engine**

Fabric Engine
420 Rue Guy
Montreal
Quebec, H3J 2L2
Canada

T: +1 450 525 3640
E: info@fabricengine.com
W: www.fabricengine.com

FABRIC ENGINE WANTS to shake up the tools that developers have at their disposal for graphics creation. The Montreal-based software maker, founded in July 2010 by Paul Doyle (*pictured right*), Phil Taylor and Peter Zion, has developed its own high-performance asset making system Creation Platform.

The tools platform is used for building 2D or 3D graphics applications that regular Python developers can use. It provides performance faster than multi-threaded C++, yet also takes care of achieving a smooth experience.

It has applications across the professional graphics industry, but its biggest benefit to game developers is its ability to make it easier for studios to create a non-destructive pipeline.

"With traditional pipelines, it's difficult to reliably get assets into the game engine without destruction of data occurring," says Fabric CEO Doyle.

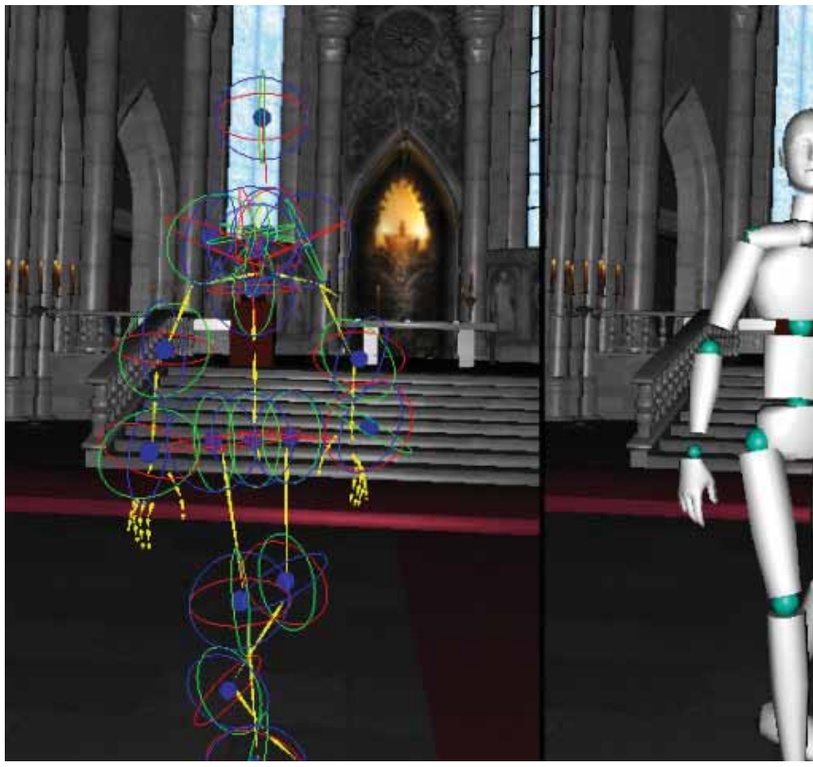
"The capabilities of next-gen platforms will lead to an increase in asset requirements, but it's prohibitive for studios to satisfy these requirements by throwing more artists at it."

To solve these issues, Doyle says studios need to be able to create custom tools that improve the flow of assets and allow for smarter, more efficient workflows.

> ***"Next-gen platforms will lead to an increase in asset requirements, but it's prohibitive to satisfy these requirements by throwing more artists at it."***
>
> Paul Doyle, Fabric Engine

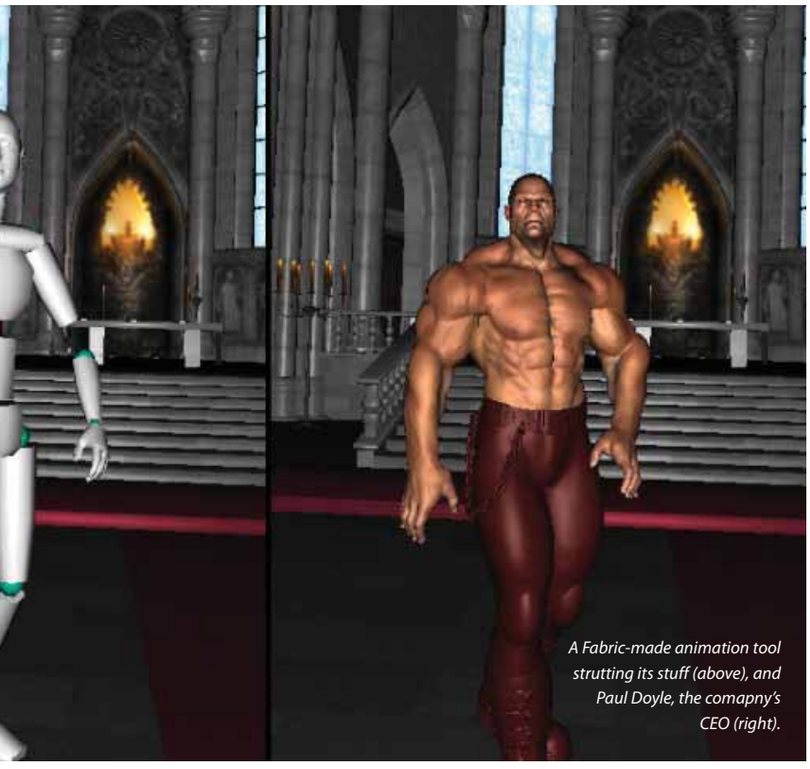
Most of the Fabric team previously worked at companies including Softimage and Autodesk, which has given them an insight into the needs of the modern production environment.

Doyle asserts that the alternatives, including customising existing DCC applications, like Maya, or developing new tools from scratch using C++, are a



Blitz Game Studios 01926 880000 www.blitzgamesstudios.com

Codeplay 0131 466 0503 www.codeplay.com



A Fabric-made animation tool strutting its stuff (above), and Paul Doyle, the comapny's CEO (right).

time-consuming and expensive process that often leads to frameworks having a one-time use.

"Maya is great for building certain tools, but Python and MEL are not high-performance languages, and there's a point within these applications where you start hitting black boxes that the vendor won't open for you," he explains.

In contrast, Doyle describes Creation Platform as "completely open", which he says makes it easy to build tools that give the kind of performance a studio needs.

Creation Platform was unveiled at the end of July and is still in its beta phase. So far the tools platform has been received warmly by those that Fabric works with, including Zoic Studios, The Third Floor and Halon Entertainment.

One of Creation's latest additions is a new subdivision surfaces system which is said to give about 35 times the performance of Maya.

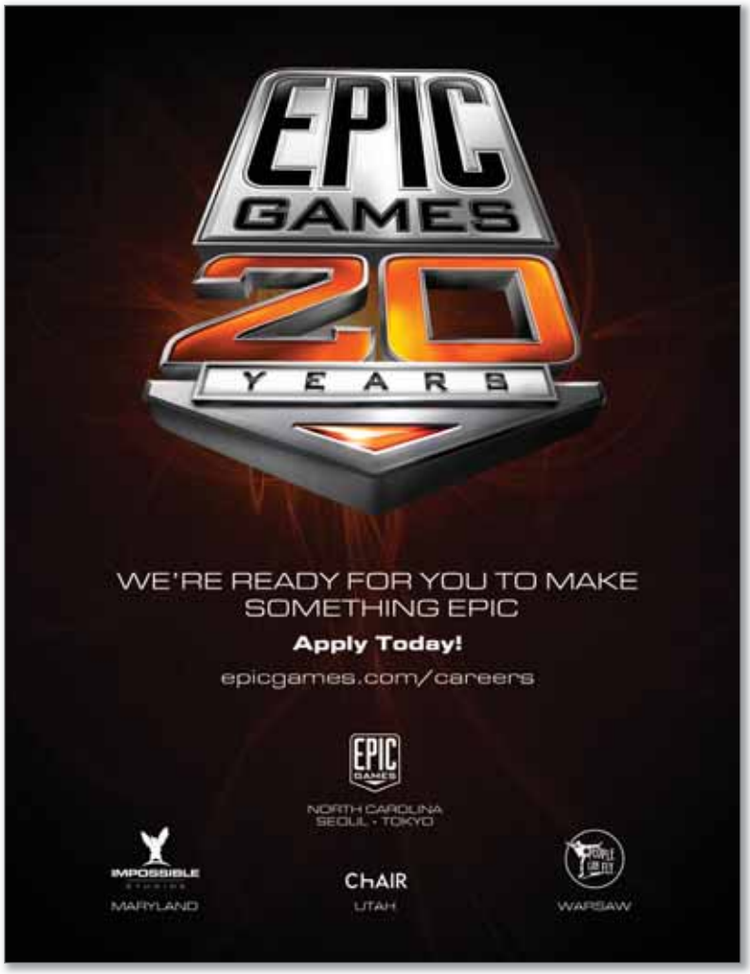
Doyle is interested in talking to games companies about approaches to animation on next-gen platforms and future character pipelines.

Fabric plans to continue developing its Creation Platform further with a new real-time renderer that is specifically designed for content production tools, including GPU compilation of KL code; character-focused work on procedural locomotion, secondary dynamics and new interaction technology.

"In the longer term, we're very interested in streamed applications and massive distribution of computation," adds Doyle.

"We've designed with these things in mind, but we're focused on the tool framework right now."

Epic **+1-919-870-1516** **www.epicgames.com**



inComm **+44 (0) 1489 556700** **www.incomm-europe.com**

TRAINING SPOTLIGHT

This month: **University of Portsmouth**

University of Portsmouth
University House
Winston Churchill Avenue
Portsmouth, PO1 2UP
United Kingdom

T: +44 0239 284 8484
E: info.centre@port.ac.uk
W: www.port.ac.uk

LOCATED ON THE UK's southern coast, the University of Portsmouth has been preparing programmers and artists for the games industry since 2004.

The university's primary courses geared towards games development are BSc (Hons) Computer Games Technology and BA (Hons) Animation. Mark Eyles is the principal lecturer on the Games course – and Dan Pinchbeck of *Dear Esther*-fame also teaches.

"We work hard to deliver the best possible course in order to provide students with industry-relevant skills," says Eyles, who is eager to add that Portsmouth's courses are driven by the needs of students and businesses.

In the first year of the games course students, including aspiring artists, get to grips with programming and 3D modelling. In the second year, two main pathways allow pupils to develop specialist skills in their chosen discipline, while working in teams on industry-like projects.

And in the third year students work on large individual and group projects as well as pathways that develop their specialist production, game design, programming or art skills.

The university keeps up with the latest industry standard development tools and software. The range of technologies available for students to use includes PS3 dev kits, 3D Studio Max, Maya, ZBrush, UDK and Microsoft XNA. It also has its own motion capture and virtual reality suites.

Portsmouth works closely with local developers such as Climax, Stainless Games and Megadev. It also has ties with the likes of Sony, Rebellion, Lionhead, Rockstar, Blitz Games Studios and Codemasters.

Eyles says its many contacts in the industry enable it to keep the course up to date with the latest industry practices and technologies.

The structure for the animation course bares some similarity to that of the games course, and is led by associate senior lecturer Jackie West.

"Our core ethos is to help students to develop as animators and artists, exploring, experimenting and developing their ideas and the wide range of skills that make up the craft of animation," she says.

There is an emphasis on developing and refining traditional art skills such

MPG www.mpg-universal.com

Testronic Laboratories +44 (0) 2070 421 700 www.testroniclabs.com

quality matters
QA Localisation • Functionality • Compliance
User Experience • Compatibility
TESTRONIC laboratories
talk to us. we can help.
talk@testroniclabs.com • +44 (0) 2070 421 700

Animations by students at the University of Portsmouth (left and below), created with support from the college's Jackie West and Mark Eyles (right, top-to-bottom)

as drawing and primary source observation, hence activities include life drawing, colour theory and practice as well a critical approach to analysis and idea generation.

Students begin with the craft of traditional hand drawn 2D animation alongside learning how to model, texture and animate in 3D. Later, they are introduced to narrative structures, storyboarding and editing.

As students progress they can opt to specialise in either 2D or 3D animation.

Like the games course, pupils work on individual and team projects that push their problem-solving, storytelling and experimentation skills.

Alumni of Portsmouth's animation course work at studios such as Double Negative, Cinesite, Framestore and EA.

Portsmouth plans to support its students and make improvements whenever it sees a new opportunity.

"Everything we do is focused towards this," says Eyles.

"We have just overhauled the course to make it even more challenging for our students and to ensure that it remains in line with the very latest technologies and practices."

The University of Hull +44(0) 1482 465951 www.mscdegrees.com

UNIVERSITY OF Hull

GAMES EDUCATION WITH A REPUTATION

- BSc & MEng Computer Science with Games Development
- MSc Games Programming

Images courtesy of Criterion Games

17 years of educating video game professionals

"The University of Hull have been a key partner for Criterion over the last 2 years, providing over 70% of our Graduate Engineering intake." Paul Ross, CTO, Criterion Games

"After some years working as a programmer, I decided to attend the MSc in Games Programming at Hull University. It was probably the best investment of my life. Now I'm a programmer at an AAA studio." Manuele Bonanno, MSc Graduate

www.mscdegrees.com

skillset APPROVED

Develop 01992 535647 www.develop-online.net

develop DIRECTORY

GREAT ADVERTISING OPPORTUNITIES

CONTACT: ALEX

alex.boucher@intentmedia.co.uk

Tel: 01992 535647

CODA

A sideways look at the games industry

THE INDUSTRY IN 140 CHARACTERS

A month in tweets by the industry elite

@zimmermaneric
Beating a good friend at a game is an artificial high that you manufacture yourself; the catnip of schadenfreude.
(Eric Zimmerman, Brooklyn Game Ensemble)
July 31st

@jonshiring
Take-Two is now worth less than *GTA V* will most certainly make in profit. I'm shocked that Take-Two hasn't been purchased. Ubisoft, too.
(Jon Shiring, Respawn Entertainment)
August 2nd

@terrycavanagh
Went to a board game meet-up this evening. They tore my game apart, really got the heart of what was wrong with it.
(Terry Cavanagh, independent games developer)
July 31st

@mrfungfung
The simple fact that there are people who question the usefulness of the Mars Rover mission demonstrates the need for education. THICK TWATS
(Tak Fung, Supermono Studios)
August 6th

@Kappische
After almost two years of nagging on the developers, *Minecraft 1.3* is now here =D
(Daniel Kaplan, Mojang Specifications)
August 1st

@mikeBithell
Super psyched that the curiosity got through the Martian defence grid.
(Mike Bithell, Bossa)
August 6th

@S0phieH
I wasn't born a game designer, I EARNED my abilities. Don't go making excuses about talent near me or you'll get an earful.
(Sophie Houlden, independent games developer)
August 1st

@megganpez
"I'd invite you over but there's no F%#king way I'm going to" – me. All the time.
(Meggan Scavio, GDC)
August 7th

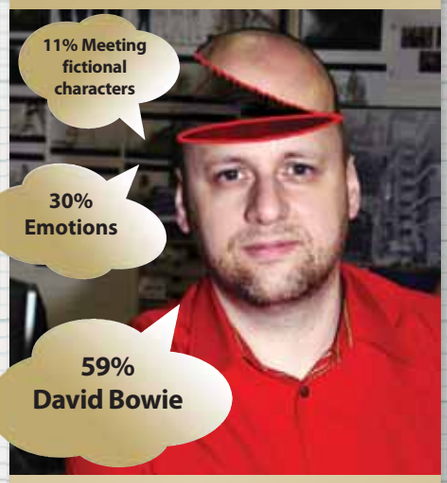
@GameDesignDan
When are we going to see *Where's Waldo* reimagined as a gritty stealth shooter?
(Dan Pearce, independent games developer)
August 2nd

@georgeb3dr
Ha! I was just informed that Zynga actually *did* have a *Minecraft* clone going (cancelled now). Told it looked identical.
(George Broussard, 3D Realms)
August 7th

AN OPEN MIND

DAVID CAGE

David Cage's muses on Beyond: Two Souls, meeting fictional characters, and revealing David Bowie's influence on games design.



On stage at San Diego Comic-con on the importance emotions to his games:
"Many video games are just about violent actions [...]. For many years I have tried to write games that are personal; that have more meaning and tell something to the player. I'm just working on emotions."

Shortly after, speaking to the PlayStation Blog at Comicon, confusing an actress from his game with a character from his game:
"It's a really big experience as a writer when you happen to meet one of your characters. That was something strong and unique."

Telling the PlayStation Blog why working with the best has helped his games development career:
"I was very fortunate in my career in that I started working with David Bowie, and I learned a lot during that. I met many really talented actors; I worked with kids, I worked with older people, I worked with amateurs."

IT FIGURES: RIP PSYGNOSIS

This month SCE Studio Liverpool, founded as Psygnosis, closed its doors after **28 years** in the business. The beloved UK studio started out in **1984**, and has since developed and published **168** games. Employing around **100 staff** up until its final days, the outfit was aquired in **1993** by Sony, ultimately becoming the platform holder's **second largest** SCEE studio. In **1999**, the Psygnosis branding was dropped, as the studio assumed the name it would hold until its last day, on **August 22nd, 2012**. The studio's **first** game was action-adventure title *Bratacass*, released in **1986** for the Amiga, Atari ST and Mac, and undestood to mix elements of predeccesor Imagine Software's unreleased games. Its final completed creation was Vita title *Wipeout **2048***, released on **February 22nd, 2012** in Europe.

THE DEVELOP DICTIONARY

Our guide to games development terminology brings you the best and the worst of industry jargon. This month we bring you the letter C

Call Stack – *A structure by which information relating to active subroutines is organised, which can be called on by a given program*

Capture the Flag – *A multiplayer game mode that's probably a little over used, but is eternally popular with consumers, and ripe for parody*

Casual – *The games development sectors very own 'c-word'. Once upon a time it was fairly well-intended, but then those pesky marketeers got their hands on it*

Cyclic coordinate descent – *A method within the speciality of inverse kinematics that uses an iterative formula to optimise joint angles, with a view to adjusting intricate bone and joint chains*

CGI – *Do you need this one defined? It stands for 'computer generated image', and it might be the games dev term most known by the ordinary public. In short, it is the household name of games development jargon*

Chamfer – *A carpentry term adopted by games developers, perhaps to emphasise a sense of craftsmanship. It means in games development what it does in woodworking: a groove or edge cut at an angle into a surface*

Chase algorithm – *Perhaps not as exciting as it sounds, if it in fact does sound exciting to any of our readers. It is a formula put in place to determine the path of a following object or in-game character*

Chip – *Most famously in a technology context, a chip is that tiny slab of grey that miniaturised not just circuit boards, but consumer electronics and numerous man-made objects. We all owe our careers to the chip. Also applicable to games theory in that a chip is a small object in board games design, typically used as a currency or point marker*

Chipping – *Something those naughty pirates do to a console to allow the playing of bootlegged versions of your games*

Cinematic – *A non-interactive way to extend the play-though time of your game*

Clipping – *Either the overlapping of surfaces in a game world, a memory-friendly rendering technique that saves on the effort of realising off-camera assets, or the cutting of an audio element's sound range to limit over-amplification*

Code – *Come on – you know this one.*

Codec – *Short for 'coder/decoder', a compression and decompression program that formats audio or video. Also an iconic piece of UI from the Metal Gear series.*

Combo – *Gamer slang from the arcades that refers to exponential score accumulators that typically reward extended execution of highly skilled actions*

Concept art – *Illustrative game artwork that used to be a tool exclusively for those fleshing out games concepts. Then those marketeers and us journalists got a taste*

Context sensitive menu – *Game UI that adapts to the needs of a game's given moment. An increasingly important and popular technique post the casualisation of video games*

Credits – *That list of studio staff names that means you have to use Achievement Points as a bribe to make players watch through*

develop FORWARD PLANNER

OCTOBER 2012

Start your own studio
Setting up on your own? We can help out with a range of features written by experts in business, finance and law

BUILD Special Feature: User Interface Tools & User Interaction
Touch-screens, motion controllers and gesture inputs have changed how players interact – but how have they changed how games are made?

Regional Focus: Scotland
We take you on a tour of the UK's northerly most nation, to visit the developers making the country's games hub count

Events
Apps World Europe – October 2nd to October 3rd
MCV / Xbox 360 pub quiz – October 4th
GameCity 7 – October 20th to October 27th

NOVEMBER 2012

Regional Focus: South & Latin America
We take a look at one of the most talked about, and least explored emerging markets

BUILD Special Feature: Character Animation
This head-to-toe guide examines what's new in the technologies that make game characters walk, run and save the world

Events:
Montreal International Game Summit – November 13th to November 14th
London Games Conference 2012 - November 21st

DECEMBER/JANUARY 2012

30 Under 30
Develop shines its talent spotlight on the best young achievers shaping the industry's future

BUILD Special Feature: Motion Capture
A detailed look at mo-cap techniques, hardware and tools, from desktop solutions to fully rigged stages

REGIONAL FOCUS: Hamburg
We visit the city in one of Europe's most economically secure nations, to see how its developers are thriving

FEBRUARY 2012

Recruitment Special
Our annual look at the jobs market includes advice for CVs, portfolios and interviews; guidance on promotions; and more

Salary Survey
Having pooled data from hundreds of professionals across every facet of the industry we bring you the results of our most far reaching survey yet, and analyse how salaries are changing

REGIONAL FOCUS: Malta
Malta might not be the most obvious destination for games development, but it's emerging as a blossoming new hub

EDITORIAL enquiries should go through to Will.Freeman@intentmedia.co.uk, or call him on 01992 535646

To discuss **ADVERTISING** contact Alex.Boucher@intentmedia.co.uk, or call him on 01992 535647

amiqus
recruitment specialists
for the games industry

THE FAQ PAGE: KARL MAGNUS TROEDSSON

Develop grills respected figures from the global games industry

Battlefield 3 developer and head of EA DICE Karl Troedsson likes to indulge in his love of motorcycles when he's not working or playing games.

Who are you and what do you do?
My name is Karl Magnus Troedsson and I'm the guy fortunate enough to be the general manager of DICE.

What are you working on right now?
The *Battlefield 3* post-launch service and the accompanying expansion packs, *Battlefield 4* – yes, I know it's a very creative name – and some scheming for the future.

What is the most recent video game you've played, and did you enjoy it?
Max Payne 3 and yes, even though I had some doubts being a die-hard fan of the original games, I really liked it.

What is your favourite game ever, and for what reason?
Tough call but *Quake* is probably my best bet. An amazing game. Extremely immersive, scary and ground-breaking in its day. Hands up if this is where you started honing your twitch skills!

What was the first video game you ever played, and did you enjoy it?
Not my absolute first game but *MineStorm* on the Vectrex changed my life for the better!

What was the first video game or product that you ever worked on in the industry?
The first commercial game was called *Mall Maniacs*, a crazy shopping cart racer created for one of Sweden's largest food stores.

> ***"I'm a gamer first. I'm passionate about making games and I believe we all could benefit from focusing more on the actual products we're creating."***

How many hours a week do you spend playing video games?
Much less since becoming a father, but maybe around ten-to-12 hours on all systems.

What area of the games industry needs more 'investment'?
We need to focus more on creating high quality entertainment for our fans, putting the gamer's needs higher up on the agenda.

What disappoints you about the video games industry today?
The dreary debates around which platform will cannibalise the other and what business model will rule almighty. Sure, I'm a businessman as well and I recognise we're in a serious transition phase.

But first and foremost I'm a gamer, passionate about making games and I believe we all could benefit greatly from focusing more on the actual products we're creating. If the execution is done right then great entertainment is insensitive to the boring parts.

What do you enjoy about the video games industry today?
Working with highly talented and passionate teams to create entertainment which hopefully somebody will thoroughly enjoy.

Of all the games you have worked on, which has been your favourite?
Battlefield 3. It was an enormous team effort during which all aspects of DICE and EA worked together in an almost magical way, something I'm very proud of having contributed to.

What game that you were not involved in would you most liked to have worked on?
I've always had special place in my heart for RPG games but never had the opportunity to work on one. *Fallout* is one of my favourite games of all time. Being part of the team building it would have been awesome.

What other developers do you admire?
I've repeatedly been impressed with Valve's efforts to create great games, their willingness to experiment as well as being determined to do things their way.

What hobbies, collections or interests do you have that are unrelated to gaming?
I ride motorcycles; preferably red ones made in Italy.

What other forms of entertainment outside games do you adore?
I've always loved movies and growing up with the sci-fi and action of the eighties has really shaped me, for good and for bad. The first three *Star Wars* movies are my best candidates (for all you younglings, I refer to the ones before Jar Jar came along and destroyed all things epic). *Aliens* and *Terminator* are also personal favourites.

amiqus Discover a global network of talent today at **amiqus.com**

develop
THE INTERNATIONAL MONTHLY FOR GAMES PROGRAMMERS, ARTISTS, MUSICIANS AND PRODUCERS

Editor-in-Chief
Michael French
michael.french@intentmedia.co.uk

Staff Writer
Aaron Lee
Aaron.Lee@intentmedia.co.uk

Design
Sam Richwood
sam.richwood@intentmedia.co.uk

Editor
Will Freeman
will.freeman@intentmedia.co.uk

Sales Manager
Alex Boucher
alex.boucher@intentmedia.co.uk

Publisher
Stuart Dinsey
stuart.dinsey@intentmedia.co.uk

Staff Writer
Craig Chapple
craig.chapple@intentmedia.co.uk

Production Manager
Kelly Jones
Kelly.Jones@intentmedia.co.uk

Managing Editor
Lisa Foster
lisa.foster@intentmedia.co.uk

Contributors
John Broomhall, John Gaudiosi, Nick Gibson, Ana Kronschnabl, Will Luton, Mark Rein, Mike Simpson

intentmedia
Intent Media is a member of the Periodical Publishers Associations

CIRCULATION IS OVER 8,000

Tel: 01992 535646 **Fax:** 01992 535648 **Web:**www.develop-online.net

Develop Magazine. Saxon House, 6a St. Andrew Street. Hertford, Hertfordshire. SG14 1JA
ISSN: 1365-7240 Copyright 2011 Printed by The Manson Group, AL3 6PZ

Subscription **UK: £35 Europe: £50 Rest of World: £70**
Enquiries, please email: dev.subscriptions@c-cms.com Tel: 01580 883 848

Charges cover 11 issues and 1st class postage or airmail dispatch for overseas subscribers

Develop is published 11 times a year, reaching 8,000 readers throughout the UK and international market

REINVENTING TELEVISION

Creator of the world's first 2-way TV experiences

NOW HIRING

http://bit.ly/NHpWZW

Microsoft Studios

© SEGA. SEGA AND THE SEGA LOGO ARE EITHER REGISTERED TRADEMARKS OR TRADEMARKS OF SEGA CORPORATION. ALL RIGHTS RESERVED. THE CREATIVE ASSEMBLY, TOTAL WAR AND THE TOTAL WAR LOGO ARE TRADEMARKS OR REGISTERED TRADEMARKS OF THE CREATIVE ASSEMBLY LIMITED. ALL OTHER TRADEMARKS ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS. ALIEN™ © 2012 TWENTIETH CENTURY FOX FILM CORPORATION. ALL RIGHTS RESERVED.